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The Pharmacology of Brucine

Gastrointestinal Diseases of Children

Sexual Impotence in the Male

Riddles Solved by Typhoid Tests

The Pernicious Vomiting of Pregnancy

Calcium Sulphide as a Surgical Adjunct

Pruritus Ani and its Treatment

The American Journal of Clinical Medicine

A MONTHLY JOURNAL

DEVOTED TO ACCURACY, DEPENDABILITY AND HONESTY IN EVERY DEPARTMENT OF MEDICINE AND TO THE SAFEGUARDING OF THE DOCTOR

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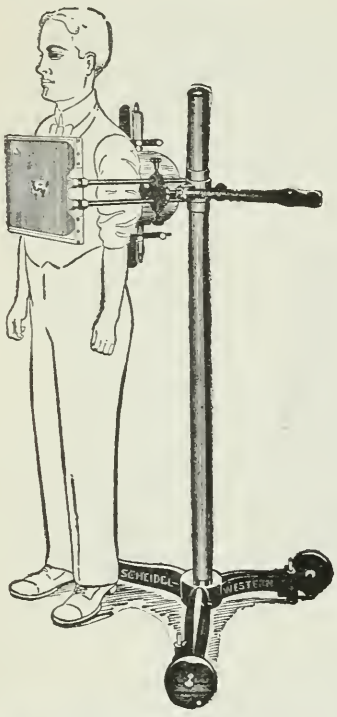

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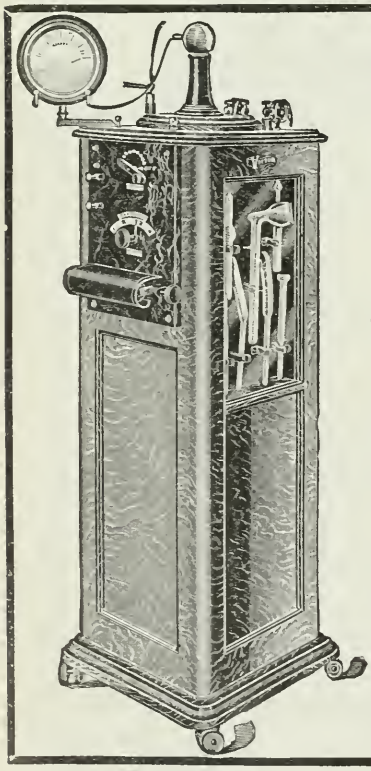

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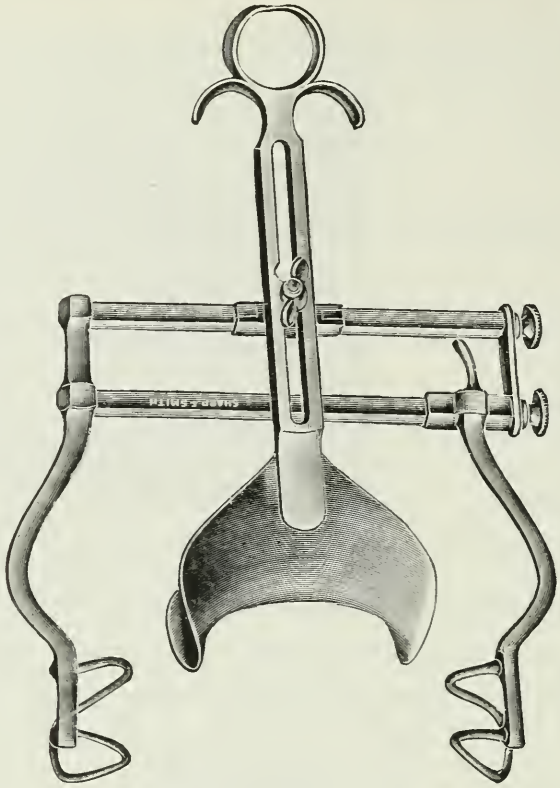

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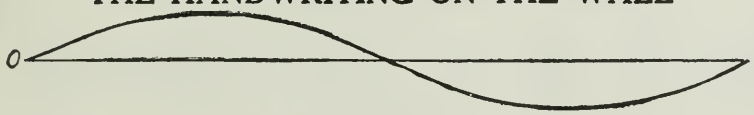

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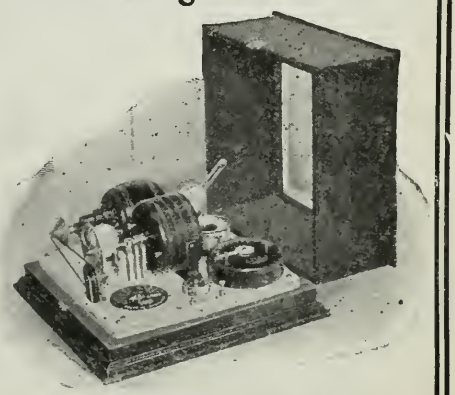

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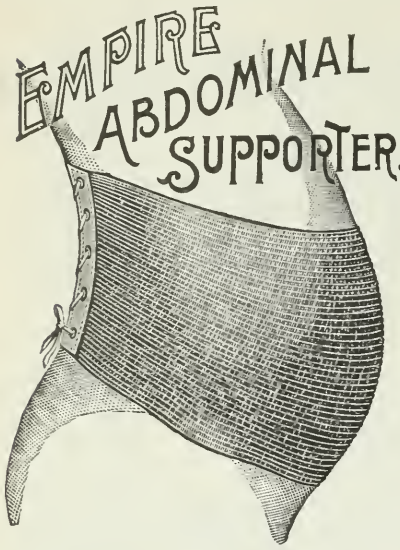

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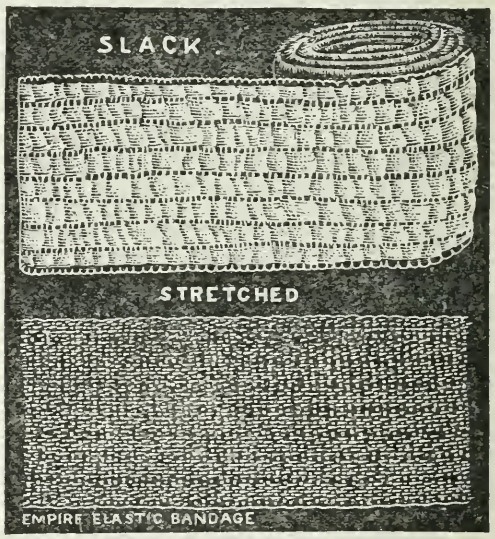

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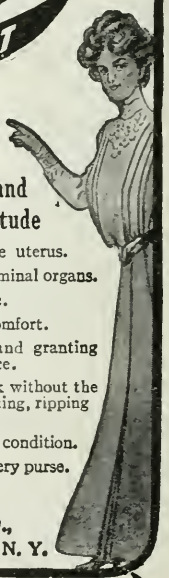

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The American Journal of CLINICAL MEDICINE

Vol. 19 SEPTEMBER, 1912 No. 9

The Pharmacology of Brucine

IN America, brucine scarcely is known among medical men, except to the few who are familiar with the work of French clinicians. Readers of "Monte Christo" may recollect that one of the characters protects himself against the poisoner by taking ascending doses of the alkaloid named. Clinicians who utilized nux vomica and ignatia amara rather vaguely realized that there was a difference in the powers of the two plants, and endeavored to establish indications for a choice. While both contain strychnine and brucine, nux vomica possesses a potential excess of the former, ignatia a preponderance of brucine.

Murrell asserted that brucine was merely "a little strychnine", there being no appreciable difference in action. The careful studies of Reichert and others, however, have shown differences that may be usefully regarded in seeking to fit our remedies accurately to the pathologic disturbances they combat.

The diversity in the results secured by various observers are due to the difficulty of obtaining specimens of these alkaloids in a state of purity. The conscience of the purveyor is easily satisfied when two alkaloids from a plant so closely resemble one another and there is such good authority for regarding them as therapeutically identical.

So it happens that the doctor who takes the trouble to apply the chemic tests to his quinine may be perplexed by getting the reactions of quinidine or cinchonidine; of atropine for hyoscyamine, morphine for codeine, cephaeline for emetine, scopolamine for hyoscine, or by finding his veratrine and aspidospermine a mixture of the alkaloids of the respective plants, instead of a single, chemically pure specimen. The caffeine of commerce is derived wholly from tea, and if there is really any therapeutic difference between caffeine and theine, as once was claimed, we have no present chance whatever of determining it.

Reichert pronounced brucine similar to strychnine in its action, except that the latter exerts forty times more convulsant power, is more rapidly absorbed, and does not affect the sensory nerves so strongly as does brucine. He observed a brief motor paralysis preceding the convulsions caused by toxic doses.

Cushny found that brucine affected the nerve-ends in voluntary muscle much more than did strychnine. Wintzenried determined that brucine primarily raised arterial pressure, depression following; that it stimulated the spinal cord, paralyzed the motor nerves, but exerted no action whatever upon the cerebrum or the sensory nerves. Lethal doses paralyze the vagi, and cause death by asphyxia. No symp-

toms follow the administration of brucine by the mouth, because it is excreted as fast as it is absorbed.

Sir Lauder Brunton states that brucine checks the oxidation of the blood and the excretion of carbon dioxide. Reflex excitability is greatly increased, to the point of inducing tetanic convulsions. Respirations become deeper and more rapid, and the lungs do more work. This applies to the smaller doses; as usual, the action is reversed by maximal doses.

Brucine exerts a local anesthetic influence equal to that of cocaine in similar strength. This furnishes a valuable indication for selection over strychnine. When the stomach is irritable, brucine may be retained and absorbed when strychnine might irritate. Either may be administered hypodermatically.

Strychnine acts more promptly than brucine, hence is preferable for speedy action; the addition of glonoin, however, by opening the blood-vessels, favors absorption, so that the brucine effect may be secured within five minutes. The very rapid excretion of brucine renders it well suited for intensive medication, each dose being well out of the system before the next gets to work. Brucine may, therefore, be given in small doses every five to thirty minutes, till the desired action has been secured. The doses should be small—from one-fourth to one-half milligram. I have tried doses up to one-fourth grain, and decidedly advise the small and quickly repeated doses for securing the best results from this alkaloid.

The place for brucine is as a general tonic, especially for women, children or delicate, weakly and highly susceptible persons, and where strychnine is too powerful a remedy for the need. We should not attempt to drive tacks with a sledge. There is something in reserving the powerful remedies, so that, if the weaker fail, we may still have something left in our repertory.

Brucine is especially effective in combating syncope, heat-exhaustion, and debility from depressing drugs or exhausting discharges. The effects are not so long-sustained as those of strychnine, and this also affords opportunity for a choice: brucine is the remedy for emergencies, and when only a temporary action is desired. As a "pick-up" brucine is preferable. In fact, in nine cases out of ten where that universal tonic and stimulant, strychnine, is employed to energize the lagging functions and "take up the slack", as John Aulde put it, it would be better to substitute brucine.

Doctors lead hard lives, and sleep only now and then, owing to the great amount of sickness at night. They also have to trust in Providence for their pay. It is much easier to call a doctor thirteen miles out into the country to subdue a mess of green corn that has insurged than it is to drive in and pay him a year later.
—George Fitch.

TYPHOID-CARRIERS

If there is one lesson above all others we have sedulously sought to inculcate, it is the importance of attending to bowel infections. Our slogan of "clean out, clear up, and keep clean" has been heard so often and so loudly that it has become known as "Abbott's" wherever doctors assemble. But now the profession at large is just beginning to comprehend the vastness of the truth underlying that apt expression.

Here and there close observers, tracing the infection of typhoid fever, have discovered that certain persons after clinical recovery from this disease do not really recover bacteriologically, but continue to carry the germs of this infection about with them; that the bacilli still generate and multiply in the patient's intestines, and are given off, to infect privies and scatter the disease among any susceptibles with whom the erstwhile patient comes in contact.

For every one of these "typhoid-carriers" who has been discovered, it is safe to say that many more exist. How many former dysenterics are now scattering these amebæ over the land? And how many other kinds of infections similarly leave in the patients' bowels a source of other cases? We do not begin to know all about the infectious microorganisms that inhabit the bowels, but the more one studies the feces, the more he is impressed with the richness of their flora

and fauna. When one reflects that the bulk of the fecal mass is not made up of food residues, but of bacteria, he may realize the enormous number of these the bowel may contain.

The bile is not now looked upon as the intestinal disinfectant, but is in fact an excellent medium for the cultivation of germs. To the acid gastric juice is assigned the principal role as a germicide. By the time the fecal material has reached the large bowel the acid has been neutralized, so that from the ileocecal valve down there is an absence of nature's safeguards.

This fact points to the danger inherent in the retention of these microbic masses beyond the time required for their collection. Twenty-four hours may be taken as the longest time that should be permitted to elapse without a complete clearing of this receptacle.

Unfortunately, too, many persons mistake daily action of the bowels for this complete emptying and, so, allow the large intestine to degenerate into a warehouse for the storing of the most intensely poisonous, the most dangerous substance known to the sanitarian. Masses form that may be retained for months, the daily passage representing merely the overflow. Patients have confidently asserted that after a brisk cathartic they have observed in the stools the seeds of fruits they had eaten not less than seven months previously.

What possibilities, in the way of disease, are not thus permitted! The innumerable varieties of organisms, very few of which have been isolated and tagged and their properties studied, have the essentials of development here—warmth, moisture, an abundance of putrescible organic matters, and the absence of all natural inhibitants.

"Yes," replies the pessimist, "but all that this amounts to is, that it is good to keep the bowels regular; and everybody knows this without your making such a to-do over it. Tell us something we don't know!"

He who looks at glass
May on it fix his eye;
Or through the crystals pass
And the whole heavens spy.

Try this experiment: Take a full dose of podophyllotoxin, follow with a saline laxative, and supplement with a copious colonic flushing and prolonged but gentle abdominal massage. Repeat all, except the podophyllotoxin, daily, as long as dark, solid or offensive matters follow. Then, at the end of a week, note the sensation of lightness, alertness, brightness, buoyancy, power, whatever term you choose to express euphoria, or well-being, physical and mental. Realize that this is the normal condition of man and woman, and that its absence is abnormal, pathologic; signifying the presence of that unpardonable physiologic sin: fecal toxemia.

"The life that counts must toil and fight;
Must hate the wrong and love the right;
Must stand for truth, by day, by night—
This is the life that counts."

FECAL TOXEMIA, AND COPPER SALTS

The absence of fecal toxemia is indicated by euphoria.

How may one best render this desirable condition continuous? We can not be physicking all the time, and the cathartic habit is not advisable. There are remedial combinations known as laxatives, the best being the familiar "anticonstipation granule", which, when taken as advised, restores the peristaltic and secretive functions of the bowel to that normal, or physiologic, balance that is requisite—not catharsis, but simply raising the tone to normal.

Unfortunately, the remedies employed are also cathartic if taken in sufficient doses, and many neglect to pay enough attention to the explicit rules we have laid down, are satisfied with the present sense of well-being following bowel emptying, and neglect the true cure that leads to the time when no drugs at all are needed.

As age approaches and colonic contractility subsides, as well as sensibility, something more is needed, unless the man possesses that rarest of gifts, of realizing that his activity is lessening and his food supply should be reduced commensurately.

The laxative foods are then to be selected, and especial attention given to the specific colon toners. A very little aloin

should be employed, with physostigmine to increase peristalsis, berberine to aid in preventing or relieving relaxation, and juglans to increase intestinal secretion. If one hitherto has kept himself free from the habit of using condiments they may now be employed in moderation with advantage. A small dose of saline laxative may be taken each morning for many years without the need of increasing the quantity.

However, we can materially aid the treatment by the use of remedies designed to restrain the activity of the intestinal inhabitants. Of the disinfectants, copper offers certain advantages. No other metal is at the same time so active as an antagonist to the microorganisms and so slightly harmful to the human being. True, copper is a poison, but much less toxic than the arsenic, mercury, and silver salts; and in the doses recommended it is free from danger.

Workers in copper come to acquire a greenish tint, and yet appreciable harm rarely accrues. Mercury, silver, arsenic, zinc, phenol, even lime present certain perils that render it necessary to keep a close watch over the patient who is ingesting any of them continuously.

The control of copper over various forms of microscopic life is so well known, as well as its relative innocuousness, that salts of this metal are employed to rid of their undesirable life the water supplied to cities.

The present writer has found that the daily use of ½ to 1 grain of copper sulphocarbolate suffices to keep the intestinal flora in due subjection. A morning saline laxative, a weekly colonic flush, and the few granules of copper sulphocarbolate suffice, in the majority of persons, to sustain the sense of well-being that comes from a well-ordered bowel. Travelers exposed to suspicious water should take a few granules of this salt daily as a preventive—for the ills following a "change of water" are due (generally) to the germs contained in the water.

That copper sulphocarbolate has a large field was shown by Dr. Cummins in his fine paper in our July issue. In cholera, in typhoid fever, in various diarrheal troubles of varying origins (including that occurring in pellagra), it has produced results hard to duplicate with other remedies; yet, as Dr. Morrison points out elsewhere in this number of CLINICAL MEDICINE, there are special indications for its use, which should be nicely developed by the thoughtful practitioner.

The rapid increase in medical knowledge may render a young man of thirty a competent teacher for the man twice as old. In meetings and out of them I have learned from the young. Many have told me that, though an old man I have remained young. I hope they did not suggest mere ignorance. But if I had not learned in societies, county and others, mostly from men far inferior in years, I should have accumulated an unenviable pile of ignorance.—Abraham Jacobi.

BRAIN SURGERY

Dr. C. C. Rogers, of Chicago, has recently reported 35 cases in which the skull was opened. There were 11 cases of abscess of the brain, with 4 deaths. In 11, where the skull was opened for the removal of tumors, there were 2 deaths. In 1 case no improvement was noted. In 13 cases of fracture of the skull the patients were operated upon, in all of which there had been hemorrhages within the brain. These may be considered practically hopeless without surgical aid. There were 6 deaths and 7 cures. All who received surgical treatment within twenty-four hours after injury were cured.

Dr. Rogers says that, when patients have received injuries of the head, become conscious and then relapse into unconsciousness, with other unfavorable symptoms, he makes it a rule to operate upon the brain.

We are not prepared to endorse Dr. Rogers' position, without a full discussion of the matter by those best qualified to discuss it, and this includes medical men as well as surgeons. We have already alluded to the tendency of the latter to judge of all cases from their experience with those handed over to them as hopeless by the internist. Naturally enough, the surgeon sees nothing but surgery in such cases. We should like to hear from internists who have treated cases similar to those described.

It goes without saying that we do not approve standing idly by and seeing any person die for lack of the application of a trephine. On the other hand, we are

not disposed to sanction the hasty rush to open the skull upon the slightest pretext. We hardly should expect a cerebral abscess, cyst or tumor to be influenced by medical means, and here the indication is a clear one; but in many cases of cerebral hemorrhages the patients recover without operation, and we have yet to see evidence that a greater proportion recover following operation.

Our attitude on the matter is neutral, or, rather, judicial. We are waiting to hear the evidence, but we want both sides before we favor or condemn Dr. Rogers' bold proposal. We have no quarrel with surgery. We believe in it, of course; and we believe in boldness; but we do not believe in sitting still and allowing human lives to be sacrificed through timidity or an unwillingness to take chances. Nevertheless, we adhere to old Davy Crockett's maxim: we want first to be sure we are right. That being so, we are willing to go ahead as far and as fast as the next one.

A man who has knowledge knows how to ask questions.—A. Jacobi.

CHEMICOGENESIS

The veracious daily papers, which never, no, never! vary from the literal truth, announce that the University of Pennsylvania savants, working in the Rockefeller Institute, have developed a method for fecundation without the connivance of the male. True, the process has been applied only to guinea-pigs, as yet; but the step between the guinea-pig and man is infinitely less than that now taken to produce the cunning little quadruped. The details so far are lacking; however, we are assured that the female has been impregnated by the injection of a solution of certain salines and "an acid similar to malic acid," and viable young cavies thereby been born, and these have been reared.

Experience with newspaper-science induces us to suspend judgment until the returns come in, when we may be able to separate the kernel of truth from the chaff added by a reporter's needs for sensational copy. But if the story is true, it is up to masculinity to inquire where we are at!

Every passing week seems to develop new testimony of our erstwhile helpmeet's ability and willingness to get along without us, and if this last function of our sex proves superfluous, we may look forward to seeing the Amazonian commonwealth rescued from the realm of fable to confront us as a startling actuality. The loneliness of life, its purposelessness, its uselessness, when this shall come to pass, may be but dimly imagined now while we, the representatives of the proud sterner sex, still enjoy the blessings vouchsafed to us by Eve's fair daughters.

No longer, forsooth, in that dread era to come, need we care for person, or for toilet, for aught esthetic, for there will be none to gaze approvingly on the manly form or its correct habiliments. Why, indeed, make efforts to secure prominence in power and wealth when no longer there are those through whom the results of our efforts may be displayed? No longer may thought of a home-coming sustain us in our labors, no longer solace us in defeat.

In that era of woman's emancipation, the enjoyment of female society can be secured only in the pristine primitive way, by lying in wait and capturing the particular specimen we desire for companion. Woman will be all-sufficient to herself. Her life will be self-ordered. She will be self-taught, self-sustained. And, awful thought! when the time comes and she craves maternity, she will hie her to the apothecaries and accomplish the object by the aid of a few chemical reagents, with never a thought conjugal.

No doubt the development of this biochemic art will furnish means of varying the product at will, so that sex, stature, muscular male development and female pulchritude, complexion, color of eyes, curliness of the hair, mental and moral bent, and all the many other traits may be determined by the chemicaled-mother's will. The babe will be dispensed per prescription, or according to specifications furnished by the architect—for necessarily there must then be that new and all-important brand of specialist, the baby-designer—puero-artifex.

Would such a state of things be desirable? If not, it is time a stop were put to this

thing right here. Since it is the Rockefeller Institute that is responsible, the most effective remedy would be to confiscate the Rockefeller fortune and turn it in to the National Treasury—a measure for which other reasons might be found, and which would command the enthusiastic approval of a large proportion of the community.

Now that this nefarious scheme of emasculating manhood of its most highly prized function has been concocted in this Institute, it is up to the political party that can "beat it to it," and can get in ahead of the suffragettes, to adopt this plank for its platform, and sweep the country.

We have the testimony of competent witnesses that the method of comparatively small and frequent doses may produce effects of a most remarkable kind in the treatment of both general and local diseases.—The Public Health Journal.

REGISTRATION IN PERU

Those among the doctors who are "kicking" about the necessity of passing the ordeals presented by the various state examining boards are advised to go to Peru and try to get a license to practice. There, the foreign physician or dentist (as well as pharmacist) who contemplates opening practice in that South American republic is required to present to the Faculty of Medicine of the University of Lima his diploma, after having the signatures to the document authenticated by the Peruvian Ministry of Foreign Affairs, and a certificate of personal identity from the Minister or Consul of the applicant's country resident in Lima; pay fees amounting to $500; and then pass severe examinations in the following five departments, viz.: (1) Theoretical-practical: descriptive, general, normal, and pathologic anatomy. General and human physiology; including actual dissection of the cadaver, with a proper description. (2) Theoretical-practical: General pathology, internal and external nosography. Make one or more surgical operations upon the cadaver. (3) Theoretical: Medical natural history, medical chemistry, medical physics. (4) Theoretical: Therapeutics, materia medica, medical jurisprudence, toxicology, hygiene. (5) Practical: Clinical examination of a patient, one in surgical and another in an obstetric case. Also, diagnosis, treatment, and clinical histories.

Dentists are required to pay fees aggregating $250, and stand examinations on the anatomy and physiology of the mouth and its pathology; and to perform one operation in dental surgery.

DR. JOHN J. TAYLOR

More than a quarter century ago we first met a quiet, modest gentleman, who then did a portion of the editorial work on *The Medical World*, owned and editorially controlled, then as now, by his brother, that able, constructive medical journalist, Dr. C. F. Taylor. These two brothers came from Indiana to Philadelphia, and by hard work, frugality, self-denial and a correct appreciation of the needs of a large section of the medical profession, built up a powerful journal—and did it right there in the "center of medicine," where many a native son of far more pretentious qualifications had failed. Not only that, but, to emphasize the lesson, John in time branched off and founded another great journal, *The Medical Council*, which also created a place for itself and has been and is one of the most conspicuous successes in the medical journalism of the times.

Those who met Dr. John Taylor found him an unassuming man, always ready to hear the other man and give heed to his views, yet withal steadfast in what he believed to be the right. I am very sure that he never did an unkind act knowingly or wished ill to any human being. He was a man of enterprise and willing to give a trial to any new idea that seemed plausible—a frame of mind that permits and promotes progress. To win his support, it was only necessary to show him that a thing was right, a good thing for the profession—and no personal influence could prevent his advocacy of it. Perhaps this was the reason he scored such a decided success in Philadelphia, for, being a product of the West, he went ahead and did things, instead of assuming them to be impossible.

Some time ago I heard that Dr. Taylor was threatened with cancer of the throat,

and a letter from him in response to my inquiry showed the rumor all too true, and gave little hope. Nevertheless, he faced the inevitable with equanimity and with a quiet, steadfast courage thoroughly in keeping with the character of the man. He died on August first at Ocean City, New Jersey—a seaside resort which he had been instrumental in building up. His wife, a native of Tennessee, and two children survive him. *The Council* has for some time been edited by others, his able son, Mr. Charles C. Taylor, being in active business management, and it will undoubtedly continue to fill a large place in medical journalism, if not exactly that to which Dr. Taylor's kindly personality raised it.

Personally I feel his loss as that of one of the few remaining friends of the past, whose ranks are growing thinner each year. He will be missed at the meetings of the American Medical Editors' Association, of which he was one of the most active members.

Mere knocking never carried you very far; sometimes a knock and then a boost has helped you; but an intelligent boost, applied at the right time, always helps both the booster and the boosted.

CLINICAL RESEARCH

The internist is not dead, but is showing signs of reaction that may lead to his ultimate recovery. For a time we have witnessed his complete eclipse, so much so that men refused to listen to anything he attempted to say for himself or his side of the professional work. Let some boy just hatched from college perform some experiments on a few little dirty guinea-pigs, and the medical world waited with bated breath for his verdict; but if some old and experienced practician made observations on the human being in the sick-room, and nobody cared to hear of them.

Why? Because we doctors worked with agencies so impure and untrustworthy that our results of today were sure to be reversed tomorrow; because some men saw things from one angle and others from another, and the two views seemed hopelessly dissimilar. Little wonder that the precise workers in scientific laboratories lost all patience with the clinicians and threw overboard the whole mass of their testimony.

One step we have at least taken—the adoption of a line of remedies true and uniform with themselves, sure to afford identical results when administered under identical conditions. The powers residing in a measured dose of morphine, quinine, atropine, hyoscine, cicutine, strychnine are as unvarying as the multiplication table—those of opium, cinchona, belladonna, hyoscyamus, conium, nux were never more than probabilities, more or less close approximations.

The next step follows inevitably: the organization of clinical observers that permits the unification of their work. We have before us an announcement of the coming sessions of the American Association of Clinical Research in New York City, November 9, at the Academy of Medicine, and we are promised such papers as these: "The Negri Bodies;" "Fluids for Tubercle Bacilli in the Urine;" "Adjustment and Function;" "Psychoanalysis and Traumbedeutung;" "A Pandemic of Malignant Encapsulated Throat Coccus;" "The Single Remedy;" "Indicanuria and Glycosuria;" "Disease-Conditions Expressive of Correct Diagnosis;" "Biochemic Problems;" and "The Two Most Far-Reaching Discoveries in Medicine."

Other papers are promised, and the energetic management of this association asks its friends to assist in making this meeting a success by attending with their friends, to promote the aim, "the systematic, scientific investigation and advancement of medicine by conclusive clinical and clinically allied methods."

"The medical man has two objects: to increase his personal knowledge for personal usefulness, and to increase and fortify the collective knowledge of medicine for the more permanent usefulness of the entire profession. No physician does his whole duty who does not live for the second object as well as for the first." So says Dr. Krauss, the permanent secretary of the association; and we strongly concur, and urge our readers who may be within

reach of this meeting to attend and contribute to its success.

Centers for such research should be formed wherever a number of physicians are within reach of each other and feel the need for self-improvement in the matter of clinical knowledge and proficiency. With an effective organization, such benefits should be accruing as we see in the case of ordinary specialists' combinations.

With our knowledge of modern physiology and pathology, with our improved methods for the scientific estimation of disease, its causes, course and results, we should be in a position to make of clinical observation what our fathers could not possibly compass.

If still there bide within your breast
One dream or one illusion,
Then wake each day and go your way,
And live without confusion.
If still there be one soul you love
Without a blame or scandal,
Then life's a game worth while, my friend,
And the game is worth the candle!
—Edward W. Mason. (National Magazine.)

BACTERIA IN SOAP

An item in the dailies calls attention to the detection of dangerous impurities discovered in soap. It's about time. Soap is neither a food nor a drug, but its use is so general that bad quality may well be regarded as a peril to be considered. That reminds me:

Years ago my attention was directed to this matter by some unpleasant phenomena occurring after the use of a soap purchased as "exceptionally pure," and even remedial. An examination detected in it the presence of microorganisms of sundry undesirable varieties.

This opened up the subject, and I had an expert chemist and bacteriologist make an examination of all the remedial soaps then on the market. These included two brands of sulphur soap, one of tar soap, besides one or two others the names of which I do not now recall.

All these soaps were found to contain very many bacteria, a naphthol soap being phenomenal in its capacity for containing them; in fact, it was remarked that it seemed to be a mass of organisms held together by a little soap. The only really pure soap was one that made no pretense of being antiseptic, but merely pure. This brand must be out of use now, for I have been unable to obtain it for years back. If some of the antiseptic soaps are thus impure, what must the ordinary varieties be!

To me, this is a serious question. Just now my hands are peeling, because, being away from home, I have been using the soaps casually furnished, instead of the ivory or fairy brands, the only ones of the common household soaps my skin will endure. Whether these cheap soaps are purer than others I do not know—the test of constant use shows that they agree with my skin, while many others I have tried do not.

Anybody who longs for a chance to get into the limelight may take the hint, and make an investigation of the soaps found in the markets.

Every child should have mud pies, grasshoppers and tadpoles, wild strawberries, acorns and pine cones, trees to climb and brooks to wade in, sand and snakes, huckleberries and hornets, and any child who has been deprived of these has been deprived of the best part of his education.—Luther Burbank.

THE IMPORTANCE OF SURGICAL ANESTHESIA

Dr. Robert H. Ferguson (*Long Island Medical Journal*, July) insists upon the fact that surgical anesthesia is a grave condition and that, both for the welfare of the patient and for the reputation of surgeon and hospital, it demands serious consideration. The doctor refers to the fact that England, of all nations of the world, looks at anesthesia the most seriously, that in that country it may be induced only by a medical man, and that hospital internes who do the routine anesthetic work are carefully supervised by professional anesthetists who are held responsible for the results.

Although the importance of proper anesthetization and the dangers arising from the careless administration of anesthetics, both immediate and remote, are recognized more and more fully in our country, these powerful agents are still treated in many places with an almost criminal

neglect and carelessness. It is time that we should realize the importance of anesthesia for the welfare of the patient and the influence it has upon the work of the surgeon and upon its results.

Just as a hospital desires to obtain the services of the most skilled surgeon possible, that operation which is only second in importance to the work done by the surgeon, viz., the operation of giving the anesthetic, should be entrusted only to men who have made a special study of the work. Moreover, just as the surgeon requires efficient and careful assistants, the anesthetist should receive the same aid. If the anesthetic state were appreciated as is the work of the surgeon, arrangements could and would be made which would equip a hospital staff with the one just as easily as with the other.

While at the present time, in all too many institutions the youngest interne has to do the routine anesthetic work, incidentally as it were, this portion of the surgical routine should receive the same care and consideration and should be prepared for just as painstakingly as the sterilization of the instruments and dressings and the preparation of the patient.

The interne or internes who are engaged in administering anesthetics should not be overburdened with work the night prior to the operation in which they have to aid. They should go to the operating room fresh and rested, so that they may be enabled to give all their energy and brain-power to the work at hand. Moreover, in the course of their daily work, the hospital authorities should see that the internes are allowed time for the study of anesthesia and that such time is used for the purpose intended.

It is commonly admitted that in many cases in which recovery from operation is retarded or endangered by complications, the patients suffer from chloroform or ether poisoning. The few accidents which have been reported as due to the use of hypodermic anesthetics are undoubtedly due in the main to the improper or careless use of these valuable agents. The skilled anesthetist who has made the subject a study should have serious trouble very rarely, indeed. Certainly there is no excuse for the haphazard manner in which the anesthetic—any anesthetic—has been and is being handled.

AN IDEAL EDUCATION

At a meeting of the Georgia Pharmaceutical Association, Mr. L. S. Brigham read a paper on "An Ideal Education for Druggists" (*N. A. R. D. Notes*, July 11), which contains so much that is true and that is equally of importance to physicians, that we shall reproduce at least portions of the paper.

Mr. Brigham started out by saying that an education is not a fixed fact of existence, an accomplished thing. It is merely a process and it is a never-ending process, literally, a "drawing out" from the individual, a development of his various faculties. Many think and speak of an "education" as they would of money in a bank, an investment accomplished and put by. On the contrary, the right education is simply the right attitude of mind and body toward the things desirable to be learned in this complex world.

The best-educated man is not one whose brain is stored with a great mass of information, but rather one who knows where to look for the information he needs on any subject. It is the man who "looks it up" that knows the most.

Many persons with fewer advantages in early life imagine that those of superior advantages carry at their tongues' ends a great fund of knowledge on every detail of whatever calling they may be engaged in; but this is far from being a fact.

Mr. Brigham relates a well-known anecdote, telling how Professor Louis Agassiz, on receiving a class of new students in natural history, was accustomed to give each member a fish, asking him to study it carefully and at the next meeting of the class to report what he had observed. Generally speaking, the boys came in and reported that they had seen a fish—that was about all. It was a fish, sure enough—there was no doubt about it. Yes, it was a fish, and probably it could swim if it was alive. Then the dear old professor would

tell them what they ought to have found in that fish, citing the whole beauty of its organism, its relations to the creatures who had gone before and who would follow—in fact, the whole history of creation and evolution were outlined in that one fish.

The ability to observe and to practise observing are indispensible adjuncts to an efficient education. It is not sufficient to have a diploma from a reputable college, and to rest content with that.

To quote Mr. Brigham: "You can bank on that for about thirty cents, unless you observe and add to that observation common sense and hard work.

"Education does not close with the little red schoolhouse, or with the grammar school, or with the high school, or with the college; education is simply a never-ending process of observation and work. The fact that a man has been through college simply means that he has been exposed to what is called an education; but sometimes that exposure does not equip those affected with training enough to compete with some giants of work, who have trained and are training themselves.

"It is going back to dig whenever you want information, finding it, using it, applying it, and then burrowing into the incidentals applying to those things, that will constitute the methods to an education. The educated mind is the open mind which is improving, and the uneducated mind is the one which doesn't try."

These remarks of Mr. Brigham's are almost epigrammatic in their sharply cut and concise truth and logic, and as they are true for pharmacists, they are even more true for physicians. Graduates of the high school, of the colleges, and of the professional school are sometimes told that their education is now completed.

Never was such a lie told since the serpent "put it over" Eve. An education to be obtained in any school, whether it be high school or college or professional school, affords an industrious student primarily a mass of information which is more or less heterogenous and all too often loosely assorted and which must by no means be confounded with knowledge, since knowledge is only that which we have acquired by experience. We are informed that the earth travels around the sun, and there is absolute mathematical evidence to support that fact, but we have never consciously seen the process, and the problem remains one of information.

A child is told that, if he puts his hand into the flame, it will burn, and, parrot-like, he will repeat this bit of what is truth to his mother. He will not *know* that fire burns until he has put his finger into the flame and has felt the discomfort and pain following upon this experiment. The possible harmfulness of fire will then no longer be a bit of information to the youngster, it will be knowledge.

In addition to the information with which the brain of the student is crammed in a more or less orderly manner during the years of study, there accumulates in his mind a certain amount of information gained by experience which will guide him where to look for such further information as he may need for the acquisition of such additional information as will enable him to meet the problems of life and the problems of his calling, and to translate this information into knowledge.

Thus it is not as simple as some people appear to think to use a dictionary and an encyclopedia correctly so as to obtain the greatest possible amount of information from the data supplied. To this end, the student must cultivate a certain orderliness of mind and of mental activity which enables him to dissect the problems, as they confront him, into their component parts and find out all that he requires about them from the various sources at his command, and then to construct from the sum total of the gathered information a complete picture, which he must adapt to the exigencies and urgencies of his own case.

In like manner the medical student must learn the proper way to investigate the various individual factors that make up a clinical picture, to appreciate the various values of the individual factors and to associate them, in order that a correct diagnosis may be made upon which the treatment is to be based. But here again a complete medical education does not mean simply that the medical student or the

young physician shall have at his instant command the treatment advocated in textbooks for a certain named disease. It means that he shall be able to consider in an orderly and logical manner the individual needs and peculiarities of the patient who has applied to him for treatment and that he shall be able to meet the special individual indications confronting him along the principles of treatment laid down in the textbooks.

In other words, a properly educated physician has learned that he does not treat a rubricked disease or "cases," but that he treats sick persons, each one of whom is a law to himself, each one of whom requires individual attention and selection of therapeutic procedures.

There is no other field of endeavor in the entire complicated mechanism of present-day civilization that requires such a thorough-going education, such a decidedly developed ability to think logically and to apply information, as is the work of the physician. With the modern researches in bacteriology, biology, immunology, chemotherapy, etc., the old-time empiric mode of treating *disease* has disappeared and the problem of treating the diseased human organism and leading it back to health has become an exceedingly complicated one, while the results are in many cases correspondingly more satisfactory than they were formerly.

We are astonished at the immensity of knowledge displayed in the medical writings of a Hippocrates, a Boerhaave, a Virchow, but even these giants in the field of medicine would find it impossible to acquire a ready command of the entire field of medical knowledge at the present day, and even Virchow, who was perhaps the most thoroughly and most generally informed medical man of his time, acknowledged the limitations of his knowledge in certain branches of medical science.

It is possible for the individual physician to acquire at least an understanding of the great questions covered by the different disciplines and to learn where to look for such additional specific and detailed information as shall enable him to meet the requirements of any given case, and that physician is the best educated one who knows where and how to find at any time any information that he may need.

It used to be considered a confession of ignorance for a physician to be unable to answer any question offhand, and a great amount of misinformation was handed out for this reason, because physicians were ashamed to say, "I don't know."

If we consult a lawyer, we consider it most proper for him to investigate the problem laid before him, to say, "I must look up the law," before he can venture an opinion.

How much more proper, then, it is for the physician to say, at least in difficult cases, "I must look up this problem and investigate it before I can pronounce upon it intelligently." It is not the physician who ventures a snap diagnosis or snap information in difficult cases, it is the physician who is truthful and admits that he must study the problem who in the end will enjoy the greatest confidence of his clients; it is the physician who knows how to study his cases, how to look up his references, and who does it, who is the best-educated physician.

OVEREATING AND ITS CONSEQUENCES

Dr. Boardman Reed, of Los Angeles, California, in calling attention in *The Southern California Practitioner* to the exceedingly prevalent evils, including dyspepsia, arteriosclerosis, premature death or disability due to overeating, cites a forcible article by Professor Marcel Labbé, of Paris, entitled "Excessive Alimentation (*Suralimentation*) as a Factor in Dyspepsia," contributed to the *Gazette Médical Belge* of February 23, 1911.

Labbé insists very emphatically that the quantity as well as the quality of the food eaten must be considered in studying the sides of dyspepsia. He states that becausesthe dyspepsias caused by irritation, intoxicating or infectious aliments there are many others, more frequent in his opinion than the formerr these being a result simply of a superabundance of even well-chosen and perfectly digestible nourishment. Such cases are more dangerous because more insidious.

"There are many persons," Labbé says, "who believe they have been perfectly hygienic because they have eaten no food not of good quality. According to them, good meat, good bread, and good wine can never injure, and conscientiously they cram themselves without scruple, and then are completely amazed when they find that an excess of food of a good kind has rendered them dyspeptic." He notes further that such dyspeptics can often bear well small amounts of even shellfish or other indigestible articles and yet will suffer after a hearty meal limited to viands usually considered safe and easily digestible. He condemns the *table d'hote* with its multitude of dishes and would like to see it replaced by meals *a la carte*, which involve less danger of overeating.

Labbé holds that the dyspepsia due to overeating may readily be recognized even when the patient is himself unconscious of the cause or will not admit having eaten excessively. Besides the bloating, flatulence, and other usual symptoms of indigestion, the liver is usually large, the stomach overdistended, dilated, and there is a slight yellowish discoloration of the skin and mucuos membranes. The stools may be too frequent, soft-pasty, fetid. The urine is dark, shows a brick-red sediment on cooling, and may reduce Fehling's solution incompletely. The nervous system is irritable and the sleep disturbed. Later and more serious troubles may be obesity, gastric hypersecretion or hyperchlorhydria, with possibly ulcer and diseases of the pancreas, liver, etc., and often enteritis and appendicitis, especially when much meat has been eaten. Labbé should have added that cancer frequently develops in the site of ulcer of the stomach, and that overeating is now everywhere admitted to be a very frequent cause of arteriosclerosis.

He further notes that the functional and, later, organic diseases of the kidneys are likely to develop, and states that "there was perhaps never an obesity after the age of forty without a certain degree of renal sclerosis." Diabetes, gout, and renal lithiasis he mentions as more familiar results of overeating.

The diagnosis, according to Labbé, can be made from the urine, which shows an excess of urea, uric acid, the salts generally and the chlorides especially. The elimination of the normal constituents is always excessive, yet, at the same time, relative to the food taken, may be deficient. He finds that lessening the nourishment will speedily cure in earlier cases and in time relieve in more advanced ones, thus proving the etiology.

In favorably commenting upon Prof. Labbé's views, Reed refers to a simple method of deciding when one is overeating, even before the development of any marked symptoms, a method which he has described recently in the third edition of his work on "Diseases of the Stomach and Intestines." In any doubtful case he would have the patient regularly weighed at short intervals, meanwhile gradually lessening the amount of nourishment taken. If then the weight did not diminish, this would prove that the amount taken before was excessive. Overweight in anyone he would consider proof in itself of overeating. The more scientific method, of course, is to estimate accurately, by weighing, the number of calories consumed; but the general practitioner is not always in a position to do this, and patients often rebel at the extra trouble and expense.

Manhood, not scholarship, is the first aim of education.—Ernest Thompson Seton.

THE PHYSICAL CONDITION OF SCHOOL CHILDREN

Every advance in civilization is met with fierce opposition. Jenner's vaccination for the prophylaxis of smallpox was not more fiercely assailed, ridiculed and opposed than are the regulations of health boards for quarantining cases of contagious diseases and thereby preventing their dissemination. The public does not really care to have physicians assume the role and fulfil the duties of guardians of the public health and opposes their efforts obstinately, as soon as these are coupled with the slightest inconvenience or hardship. On the other hand, the same public is quite ready to blame the physician for the spread of any

contagion and for physical conditions which might have been prevented by attention to the orders of medical attendants.

We see the same unreasonable attitude manifested all through the country in the foolish objections that are made today against the institution of medical inspection of schools. Parents who ought to be thankful for having their attention called to incipient irregularities in the physical or mental make-up of their children, at a time when attention to them promises good results, resent the determination of such irregularities by physicians employed by the municipality as an unwarrantable interference with their personal rights; and those parents who are most careless in their attention to matters of hygiene and sanitation are most vindictive in their opposition.

Yet medical school inspection is a very important link in the chain of public prophylaxis. If we consider the alarming frequency of abnormal vision, of spinal deviations, of incipient tuberculosis, of adenoids, and of similar troubles, which, if allowed to progress, are almost certain to prevent a wholesome and normal development of the children, we wonder that any parents could be so utterly foolish and fatuous as to object to these facts being brought to their knowledge, and how they could be so criminally negligent as to refuse to give them proper attention.

The necessity of school inspection and the great frequency of anomalies was made painfully manifest in the report of Van den Bergh, of Brussels, to the Belgian Ophthalmological Society, on the results of an investigation of 275 classes in the primary and grammar grades, with a total enrollment of 1100 pupils. This report is abstracted in *Ophthalmology*.

Among 800 pupils in the primary grades, only 19 percent maintained the proper attitude (beyond 25 centimeters from their work).

Eighty-one percent had a vicious attitude; one-third of these students worked at 4 to 10 cm.; one-third, from 10 to 15 cm.; one-sixth, between 15 and 20 cm.; and one-sixth, between 20 and 25 cm.

In the great majority of cases this improper attitude was not due to defective lighting, nor to incorrect school furniture, nor to defective vision.

The whole trouble was simply one of faulty attitude, requiring a more strict surveillance on the part of the teachers.

The author believed that, in calling attention to a fact, which by its generalization constitutes a true calamity, he has rendered a great service to the teachers.

The old fashioned way won't do. Conservatives argue that in the good old times it was a case of the survival of the fittest; progressives can see in it only the survival of the luckiest.—Bulletin, Chicago Health Department.

PRURITUS ANI

The indefatigable secretary of the American Proctologic Society has placed the minutes of its annual meeting at the disposal of every medical journal in the country and doubtless most of them will present these to their readers. We have not space for such material, valuable as it may be, but there is one paper of those presented that deserves attention from the general practician, that of Dwight H. Murray, on "Pruritus Ani."

The writer's first experience with this malady came many years ago, when a man walked into the office, laid a revolver on the table and remarked that he wanted relief or would shoot himself then and there. That afforded a vivid idea of the torment inflicted by the itching.

Years later came another case, in which every local application suggested in a well-stocked medical library was tried without benefit, including pure nitric acid. Retention of feces from distortion of the bowel, with toxins of the itch-generating sorts, was the etiology finally settled upon. The patient committed suicide later, but for this, there were other adequate causes.

Dr. Murray analyzes 900 cases of rectal disease, in 94 of which pruritus ani was present. Sometimes the pruritus attended constipation, hemorrhoids, anal growths, ulcers, disease of crypts, hypertrophied papillæ, polypi, and fistulas; but of each there were many more cases in which there was no pruritus. When present, it was a

mere coincidence. Leakage or moisture about the anus stood in the same category.

In 32 of the 94 cases of pruritus, the predominant condition was a streptococcic infection of the skin. The others he designates as pruritus ani simplex, the streptococcic cases as coccigenous pruritus ani. To the skin infection he attributes the moisture and infiltration present.

Dr. Murray's remedy is an autogenous vaccine, employed for months if necessary. All his cases showed "very marked improvement" or cures. In the use of the vaccines, he advised the avoidance of excessive reaction, the use of small initial doses, and repetition only after the previous reaction had completely subsided.

The newest is naturally the most attractive—but is it possible for a local streptococcus infection to resist local germicides, applied in sufficient strength and frequency?

Try copper sulphocarbolate, in increasing-strength solutions, applied to the affected region, and in enemas, to flush the colon.

If there is naught but what we see,
What is the wide world worth to me?
But is there naught save what we see?
A thousand things on every hand
My sense is numb to understand:
I know we eddy round the sun;
When has it dizzied anyone?
I know the round worlds draw from far,
Through hollow systems, star to star;
But who has e'er upon a strand
Of those great cables laid a hand?

—Edward Rowland Sill.

THOSE AWFUL EXAMINATIONS

The Lancet-Clinic (June 15) calls attention to the absurdity of examinations in public schools as they are commonly held. The editor points out, very correctly, that the teachers who have had charge of the pupils for several terms or years, up to the date of examination, know full well the actual standing and acquirements of each child and can tell in advance, in the great majority of cases, who will pass and who will fail, This is so true that an unexpected excellence in any examination paper must necessarily arouse suspicion of cribbing on the part of the pupil; and the result of written examinations does not form a positive indication of the pupil's attainments, because in many cases the ability to pass a written examination is merely the result of cramming, and the information thu, hastily acquired will be lost just as rapidly.

There is another, and far more serious, objection to examinations as they are conducted now, and that is the physical and mental harm that accrues to the pupil through the protracted and severe forcing process during the last term, in order to prepare for examination. The confinement in the study after school hours, the mental tension, the nervousness due to fear of failure, and so on, all tend to harm the young people at a critical time of their development.

The Lancet-Clinic concludes that it is evident that a different system should be pursued. "Would it not," the editor continues, "from every point of view and for every reason, be better to reverse the position of teacher and scholar and devote the last few weeks of the school-term to a daily quiz of the teacher on the part of the pupils on points that they have not thoroughly understood in the progress of their studies, or on points not sufficiently elucidated in their textbooks? If the object of schooling is the imparting of knowledge to the young, this method would impart knowledge in a logical and scientific way and without any nervous wear and tear or mental confusion on the part either of pupil or teacher. After a week or so of this work the teacher could judge from the character of the questions asked and from the previous class-room record whether or not the pupil is educationally fitted to pass into the next grade, or to be graduated, or needed another year of instruction before being advanced to a higher standing or entitled to a diploma."

The method proposed by our confrère has much to commend it, but perhaps fully as much to condemn it. A pupil may be versatile in asking questions, without having intellectual industry or a special thirst for knowledge. Still, we should have in our schools, even in the lowest grades, more of the seminary method of instruction, in which the teacher should lead in discussions, or "talks," about the topics studied. This would intensify interest and thus draw out and develop the child's understanding.

Leading Articles

The Gastrointestinal Diseases of Children

With Special Reference to Those of the Summer Months

By W. C. WOLVERTON, M. D., Fort Dodge, Iowa

EDITORIAL NOTE.—This is a very timely article. While the summer is drawing to a close, the problems of infantile life will be with us for some weeks and we should be prepared to cope with them successfully. Much practical help will be found in this paper.

THE annual slaughter of the innocents is now in full swing, and a few words as to the treatment of this very numerous class of cases is in order.

Of course, we all agree that the proper treatment is prophylaxis; but there exists among mothers so much of thoughtlessness, ignorance, and often of indifference regarding the all-important subject of proper feeding that we are certain to meet with a terribly large number of such cases during the hot months.

It is a very well-known fact that infants do much better when nursed at the mother's breast than do those fed upon some artificial food. There are very few mothers who are really unable to nurse their babies; and we, as physicians, should do our utmost to check the growing tendency toward bottle-feeding, with its long train of attendant evils.

As to Weaning, Condensed Milk, and Nursing Bottles

As far as possible, weaning the child should be avoided during the heated months. However, when some real contraindication to breast-feeding exists, then great care should be exercised in the selection and preparation of the artificial food. Especially should the mother be cautioned against a too rapid increase in the proportion of the cow's milk added to the food. Where the mother can be taught to sterilize the milk, and ice is at hand with which immediately to cool the same after it has been brought to the sterilizing temperature, this one measure alone will be found of great value in the prevention of milk-poisoning, or "cholera infantum," as it is commonly called.

Overfeeding must be studiously avoided; reducing, during the hot months, the size of the feeding by a third and making up the deficiency by increased ingestion of water. The baby should have plenty of *sterile* water between feedings.

An important contraindication to breast-feeding is menstruation during the period of lactation; that is, when it disturbs the baby's digestive apparatus. I have seen many instances in which the nursing baby would be very sick during each menstrual week; and in such cases, where a weight-chart is kept, the weight is at a standstill during the week in question, or the child may lose so much weight during that period that it takes the rest of the month to regain the loss. Here it is necessary to wean the child and to find an efficient substitute food.

It may be well to remark right here that a baby's stomach is not a chemist's test tube; and often, after we have worked out a more or less complicated milk-mixture by means of an algebraic formula, we find that it does not "agree" at all, while some "old-woman's idea" scores a bull's-eye, instead.

I recall the case of a very delicate baby who did not do well on any of the well-known infant's foods. Finally the point was reached where the baby did not retain even sweet whey. Then someone suggested condensed milk, asking my opinion of it as an infant's food. It was the last thing I should have recommended in such an extreme case, as this particular brand of condensed milk is known to contain about 25 percent of cane-sugar(!).

I had been taught that an infant could not digest cane-sugar until the child was at least a year old. However, upon looking the matter up in Chapin's splendid new book on "Infant Feeding," I found, to my great surprise, that the author recommended the trial of condensed milk in such cases, on the ground that during the process of inspissation the cane-sugar apparently underwent some change which rendered it assimilable by infants. So we tried out the condensed milk (which has at least the virtue of being sterile), and the baby began at once to thrive, and has continued to do so.

When babies must be fed from a bottle, let us at least insist that a nipple be used which fits over the neck of the bottle without the intervention of any tubing. Those nursing bottles fitted with a "length of garden hose"—as one of my former medical teachers used to call it—are the champion baby-killers of the heated months. I tried to preach this fact into the German Russians of North Dakota during my six-years' residence among them, but with little success, as it was "*zu viel muehe*" to hold the tubeless bottle while the baby nursed—too much trouble for them.

First of All Clean Out the Bowels

Coming now to the actual treatment of these cases as we encounter them, the *thing of prime importance* is to secure and maintain a *clean gastrointestinal tract.* This can be quickly accomplished by giving aromatic calomel, from 1-10 to 1-4, grain, according to age, every one-half to one hour to effect; or aromatic castor oil, in dram doses, will serve the same purpose. While waiting for this purge to act, it is well to clear out the colon by means of a glycerin or a physiologic saline enema. If the child is old enough, it is well to follow the calomel by a dose of effervescent saline laxative.

Next Comes the Question of Feeding

An all-important measure in the treatment of these gastrointestinal cases, but one of whose necessity it often is hard to convince the mother, is to stop immediately all feeding for at least twenty-four hours, or longer if necessary. During this period, only cold *sterile* water is to be given, unless there is extreme prostration when the child is first seen; in the latter case, small amounts of whisky or brandy may be given. Small doses of strychnine and of atropine, administered hypodermatically, are of undoubted value, as is also physiologic saline solution, introduced into the rectum and sigmoid flexure through a catheter, by the drop-method, ("Murphy drip"). The last-named measure is of especial value when there have been profuse serous discharges, with consequent prostration and a small, weak, rapid pulse.

When a clean alimentary canal has been secured and the nausea and vomiting have ceased, feeding may be cautiously attempted. A very good preparation is that known as "Jacobi's mixture," consisting of 5 ounces of barley water, the white of 1 egg, a little salt and sugar, and some orange or lemon juice. To this may be added 1 or 2 drams of whisky or brandy. Of this solution a teaspoonful is to be given every ten or fifteen minutes, or as seems advisable. In case of persistent nausea and vomiting, this mixture may be given per rectum. Arrowroot gruel is another excellent substitute with which to begin feeding.

Medication and Gastrointestinal Disinfection

When one knows certainly that the gastrointestinal tract has been thoroughly cleansed, but an active peristalsis still persists, with griping pain and tenesmus, then camphorated tincture of opium in small dosage, repeated to effect, is indicated. But first *be sure* that you are not locking up in the belly a lot of acid, putrefying material.

Bismuth is a remedy of great value. The subnitrate may be given in aggregate dose of

2 drams in each twenty-four hours throughout the disease. The subgallate should be given in doses of from 2 to 5 grains every two hours. Or one of the various preparations of the finely divided oxyhydrate of bismuth in suspension (known as milk of bismuth, for instance) may advantageously be administered. But whatever bismuth preparation is given, it must be in a fine state of division, so as to be absolutely unirritating. When so given, these preparations are soothing and protective to the intestinal mucosa; they also tend to neutralize the acidity usually present.

When the stools are green and have an offensive, sour odor, intestinal antiseptics are in order. The phenolsulphonates (sulphocarbolates) are of especial value, but must be given well diluted, to avoid nausea. When the lower bowel is affected, sulphocarbolate enemata are also indicated. Copper arsenite, in doses of 1-200 to 1-100 grain every two to three hours, also is an intestinal antiseptic of value. Resorcin and salol also have a place as intestinal antiseptics.

As the symptoms abate and convalescence is established, a very little milk well diluted with barley water or arrowroot gruel may cautiously be added to the diet. Increasing the amount of milk must be done very gradually and with extreme caution; and alimentation must be reduced or temporarily entirely suspended at the first sign of a return of the former trouble.

When the trouble has extended to the lower bowel, and blood and mucus appear in the stools, enemata containing 1 ounce of the glycerite of tannin (U. S. P.) will promptly control the bleeding. Have the enema given every time blood is seen in the stools. One enema usually causes the prompt disappearance of blood from the stools for at least twenty-four hours.

Another astringent and antiseptic solution of great value in those cases involving the lower bowel is solution of aluminum acetate, adding 1 ounce of the solution to a pint of warm water and injecting slowly through a large catheter.

Cholera Infantum

Cholera infantum, so called, is undoubtedly due to a specific infection of the milk used as food, and the disease is characterized by profound toxemia and serous alvine discharges. Treat it as you would any other case of poisoning by an intense chemical irritant. Give no food whatever, and even no water to drink, for at least twenty-four hours.

Immediately, and most thoroughly, wash out both stomach and bowels with large quantities of sterile physiologic salt solution; gastric lavage, using a large catheter (No. 16, Amer.), being a safe procedure and attended with no great difficulty. It is well, after lavage, to throw a solution of tannin into the stomach and bowels, for the purpose of forming insoluble compounds with any toxins remaining. If vomiting and purging recur, repeat the lavage.

Stimulants are needed: give whisky, diluted with cold water, in small quantities, frequently repeated, either by mouth, or hypodermatically.

To stimulate the heart, quiet the nervous manifestations, and inhibit the enormous loss of serum from the intestinal blood-vessels, morphine, 1-100 grain, and atropine, 1-800 grain, given hypodermatically and repeated hourly to effect, seem the very best combination yet suggested; this being contraindicated only when there is stupor.

To allay the great thirst and replace the lost serum, physiologic salt solution is to be injected slowly and in large quantities into the subcutaneous tissues. Giving large amounts of water by mouth only increase the gastric irritation.

For the purpose of combating high temperature, spongings with cool diluted alcohol should be made. On the other hand, in collapse, with subnormal temperature, heat is decidedly indicated.

When the symptoms begin to abate and recovery seems probable, great care must be exercised as regards return to food, and strictest surveillance of diet kept up for several weeks; for recurrences are fairly common after very slight dietetic errors.

Some Bacteriologic Pointers

In closing, a few words should be said regarding bacterial therapy. It is usually impossible to ascertain what varieties of microorganisms are causing these gastro-

intestinal upheavals, while the course of the disease is too rapid to make cultures, with the idea of producing an autogenous bacterin.

However, we *can* use stock bacterins containing the organisms known to be most often at fault, such as the colon bacillus, the streptococcus, the various staphylococci, and the pneumococcus. These bacterins cannot possibly do any harm, and their employment with the idea of raising the little patient's resistance seems a logical procedure.

Also, buttermilk made with cultures of the Bulgarian lactic-acid bacillus, or the administration of tablets containing the living bacilli, in many instances has appeared to be of distinct benefit. When the bacilli are given in tablet form, a little milk-sugar should be taken with the tablets.

Diseased Tonsils, and Adenoids

With an Improved Operative Method

By A. B. MIDDLETON, M. D., Pontiac, Illinois

Lecturer on Pathology of the Eye, American Medical College, St. Louis, Missouri

EDITORIAL NOTE.—We have come at last to realize that the operations for the removal of the tonsils and adenoids are not so free from danger as we once thought them. Every improvement in the operative technic is to be welcomed. Dr. Middleton presents some interesting and novel ideas, which deserve the most careful consideration.

THE subject to be considered here is one that should interest every physician; not only should specialists pay attention to the tonsils, but the internists as well.

Modern research and investigation has proven that many a trouble you and I considered and treated as a primary affection a few years ago is now known to be a secondary ailment resulting from diseased tonsils and from adenoids. This fact alone explains why the therapeutic agents employed at that time were of no value, the patient recovering of his own accord in spite of the treatment.

Tonsils and adenoids, by virtue of their location in the throat, are continually exposed to contact with every morsel of food eaten, every drop of water drunk, and every atom of air entering the lungs. Also, being very vascular, they are constantly absorbing toxic products and pouring them into the blood stream and directly into the lymphatic spaces and channels.

Hence, the fact that the tonsils are diseased more frequently than any other gland in the body and that ten percent of all affected tonsils are tuberculous, is enough to fear these organs when they become diseased.

Tonsillectomy Must Be Radical

Tonsils often, without apparent cause, become very much enlarged; but, if not diseased and not mechanically interfering with breathing, there is no more of an indication for their removal than the amputation of a normal foot would be indicated because it required a large shoe. On the other hand, if a tonsil is diseased, it should be removed *en capsule*, no matter how small or how large it may be; and, when it is properly removed, every vestige of the gland and its capsule should come out.

Incomplete tonsil surgery does more harm than good. At one time, a few years ago, all that was required to treat a diseased tonsil surgically was to remove a portion of it with the tonsillotome and trust to nature for the formation of enough scar-tissue to do the rest. Today, that kind of tonsil surgery is known to be incomplete, as it hopelessly fails to bring about the desired result and relief.

*Read before the North Central Illinois Medical Association, at Streator, Illinois.

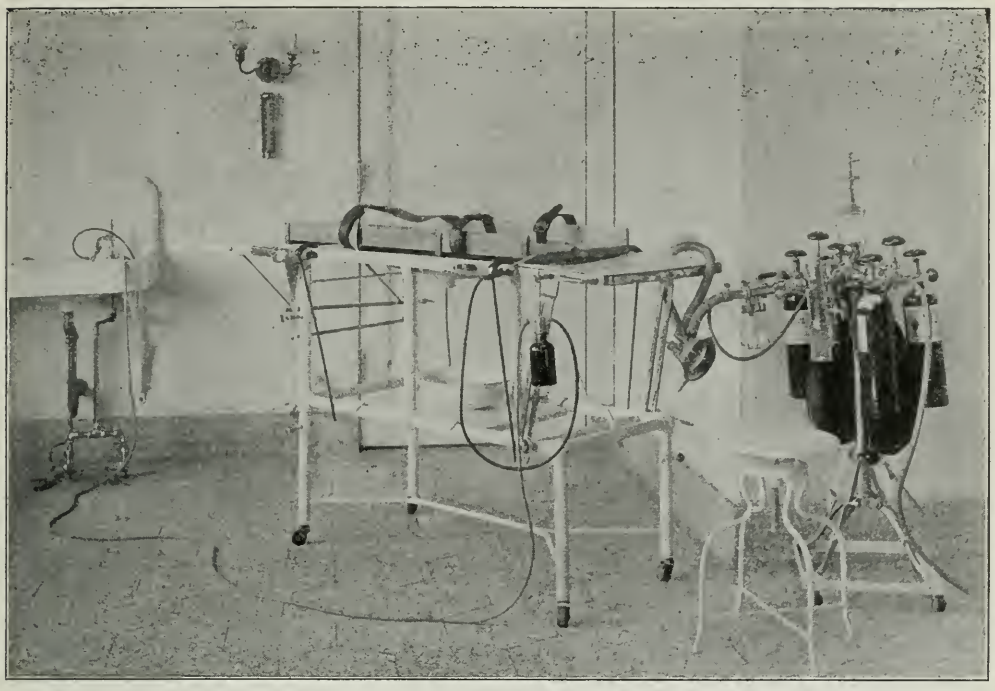


Fig. 1. The Middleton platform for oral surgery when let down on the table. Also blood and mucus ejector.

The greatest harm following the removal of tonsils is not entirely to the subject himself, but often to friends who are in real need of this operation. Inasmuch as his hopes did not materialize, he becomes prejudiced (unaware that the operation was improperly done), and so advises his invalid friends against having anything done. If this bad advice is followed, the delay often may result in some permanent damage, such as impaired hearing or general tuberculosis.

Every doctor who has a tonsillotome should throw it away; then he will not be tempted to put it to use. The complete removal of tonsils *en capsule* is a simple and easy operation, making it ridiculous to continue the old way, when the results are so unfavorable.

Chronic Sore Throat, and Disease

Many cases of muscular rheumatism are preceded by follicular tonsillitis, and during the attack the patient complains of sore throat; a symptom which often is called, by the attending doctor, rheumatic sore throat. These patients learn to notice that when the throat begins to get sore, rheumatism soon follows. They also learn that when the throat begins to recover, in a short time the rheumatic attack is gone. From these symptoms, they often make an accurate prophesy of their recovery.

Cases of this kind should interest the internist, as they frequently find slight rheumatic cases associated with throat trouble. Often, in such cases, the rheumatism is entirely secondary to the toxins produced by some form of diseased condition within the tonsil, which is constantly pouring into the lymph and blood stream an autogenous toxin which, in this particular individual, causes rheumatism. Patients with purely secondary rheumatic attacks of this kind recover beautifully after a complete removal of the tonsils.

Several of those present here have had the tonsils removed from some of their rheumatic patients, and so far as I have been able to learn not a single one of these patients operated upon in St. James Hospital last year has had a severe attack of rheumatism since. Just here I wish to say that, often, cases of myocarditis of an

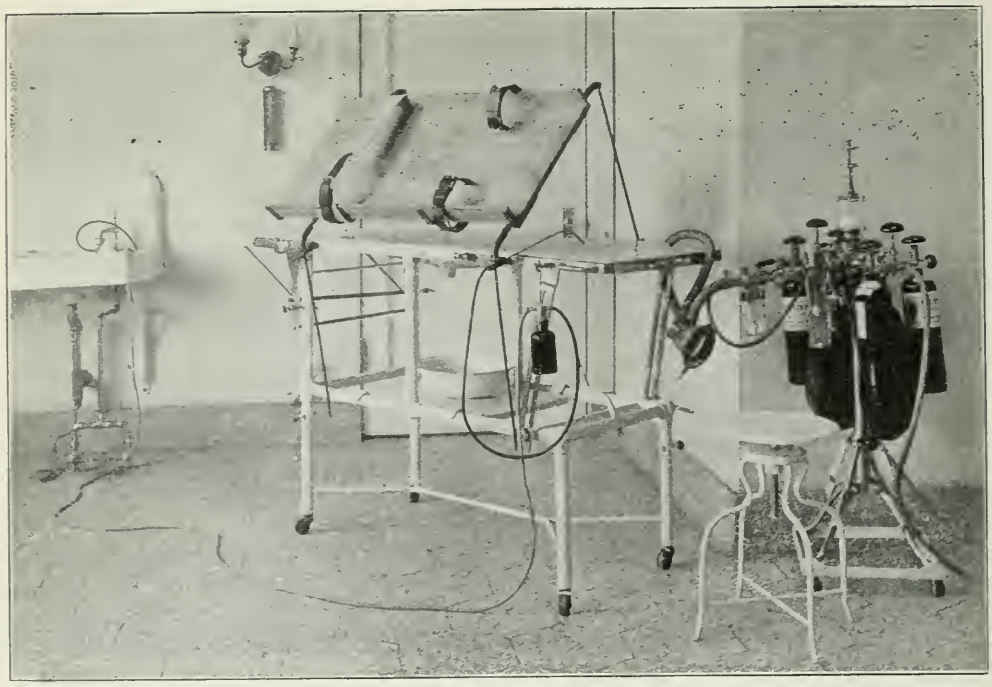


Fig. 2. The Middleton platform for oral surgery when raised to place the patient upon his side. Also, his blood and mucus injector.

obscure origin are due to the toxins manufactured by diseased tonsils; the removal of the tonsils causing a cure of the heart trouble is the positive proof of this.

The tonsil is a part of the lymphatic channel which connects the intramuscular spaces, synovial cavities, and lymphatic glands. It is a gland having a very strong absorbing as well as a large secreting power, which makes it liable to cause almost any kind of secondary trouble when in an active pathologic condition.

It matters not by what method tonsils are enucleated—every operator thinks his is the best. The one thing to bear in mind in tonsil surgery is to remove the entire tonsil and its capsule without doing injury to any of the contiguous structures.

The crypts in the tonsils, whose walls have a very thin cover of squamous epithelium, are eight to ten in number, and they constitute the real danger channels, for in them particles of food and all kinds of debris are retained, and nearly every kind of known bacteria.

A crypt often becomes closed, and then nature endeavors to rid it of its foreign material, permitting an inflammatory condition to begin, this spreading until in a short time we have a case of parenchymatous tonsillitis, due to an extension of the infection. This, in a few days, produces enough toxins, which, when absorbed into the blood, causes the individual to suffer with a regular set of general symptoms that, often, we call grip.

Recurrent Tonsillitis Must Be Investigated

Patients with recurring tonsillitis frequently apply for treatment again and again. In these cases, the routine gargle is prescribed, the patient is made to feel better, the throat becomes less painful, and he is considered cured; still, many times this is not so. Now, supposing such a person's diseased tonsils are allowed to remain undisturbed, then this patient might innocently continue to carry within his throat a dangerous condition, not realizing his real danger until eventually some serious trouble develops.

By way of illustration, permit me to recite a unique and instructive case from my practice.

Fig. 3. Team work in tonsillar operation. Nurse across table with right hand holds tongue-depressor, and with left controls the anesthetic. The anesthetist has both hands free for the head. Left hand of nurse behind operator holds blood and mucus ejector; right hand handles the instruments. When operator finishes with an instrument he lays it on his lap, thus avoiding the awkwardness of reaching to nurse or table.

A young man, 26 years of age, had a sore throat some eight years ago and was told by his physician that his tonsils were badly diseased and should be removed. This advice was not followed, the trouble being looked upon as trifling and the advice rather poor.

The man's throat continued to give trouble, this each year growing worse, and from time to time the attacks not only lasted longer but grew more severe; until eight years later, during an attack, a smear was made from a crypt of one tonsil, and it showed many pus-cells, streptococci, staphylococci, and other microorganisms. The whole throat was very much injected and inflamed at the time. The usual throat antiseptics, in the form of gargles, and so on, were prescribed, and the advice was repeated that the tonsils be completely removed after the subsidence of the acute inflammatory symptoms.

The patient was not seen again for three months, when he returned to exhibit what he called a healthy throat, and thus hoped to prove how ridiculous it would have been to operate. A smear now taken was like the former one, which had been made during the inflammatory attack, except that there was a great reduction in pus-cells.

Several months later, this man returned with a troublesome hacking cough, with not much soreness in the throat, but complaining of a constant annoying glycerin-like phlegm accumulating in the throat, keeping him awake at nights and spoiling his appetite. He had many other disagreeable symptoms, and had lost fifteen pounds in weight. He said he was sick all over.

A smear made at this time was an almost complete duplicate of the first specimen, besides exhibiting many thousands of tuberculosis bacilli. In fact, the tonsils were like a regular culture-tube filled with the bacilli.

The presence of these organisms, together with other constitutional symptoms,

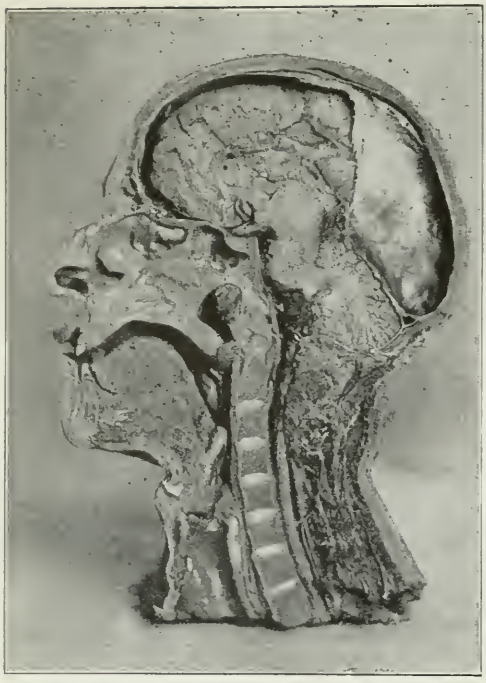


Fig. 4. Sectioned head of a male adult, showing adenoids and a submerged tonsil.

frightened the patient, and he insisted on having his tonsils removed without delay. When taken out, these tonsils were found to be typically tuberculous, with the mucous surface broken and resembling a cauliflower.

In passing, I wish to say that this young man made an excellent recovery, gained twenty pounds in a short time, has married, works hard every day, feels fine, and appears to be enjoying the best of health.

I have recited this case simply to show how near a patient may come to contracting general tuberculosis, by stubbornly refusing to have diseased tonsils treated surgically, when the patient fails to realize his danger, thinking his throat mildly diseased only at times. In this man's case, the tonsils were badly diseased all the time. At periods he had enough resistive power to keep the pathogenic bacteria in check so as not to cause throat symptoms, but the bacilli persisted in the crypts, which constituted a perfect culture-ground for the thriving of the tuberculosis bacilli.

The complete removal of the gland and its capsule puts a stop to all danger if done before any secondary trouble has developed, while frequently checking the progress even after these have made their appearance.

Preliminary Steps in Tonsillectomy

In order to do the operation properly, it is absolutely necessary to have the patient's mouth remain wide opened, fully illuminated, and free from blood and mucus. His position is very important. A properly devised table places the patient on the side, and he is held there with but very little effort. The head must be slightly lower than the feet, so as to allow the secretions to gravitate into the mouth cavity and to drain out, providing the face is slightly turned downward. The operating table should be slightly higher than the usual table, the operator sitting on a low stool and wearing an electric head-light.

The patient's mouth being held open with a Whitehead gag, a free and unobstructed view of the throat presents itself. It may be well to mention that the operator should be wearing a rubber apron under his sterilized gown, as then he may deposit

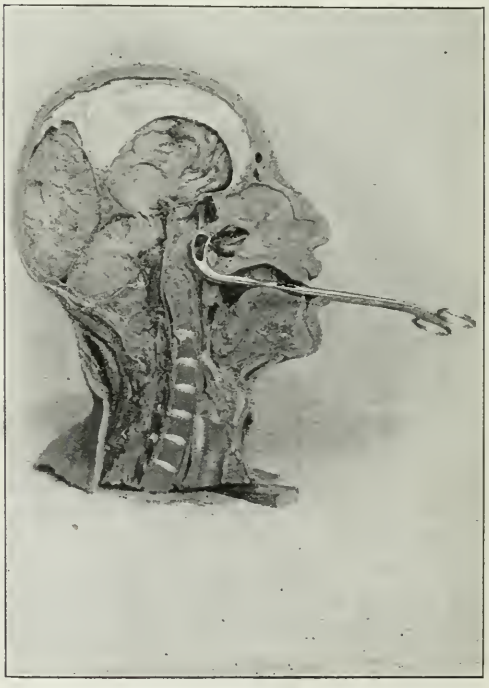


Fig. 5. Sectioned head, showing position of forceps at time adenoids are removed. Also shows pillars of tonsil and tonsillar fossæ after a complete removal of submerged tonsil.

upon his lap the instruments as he is through using them, thus avoiding awkward reaching to the table.

Fig. 6. Adenoids as they appear when removed in one piece.

When ether is given to children having adenoids, it causes the latter to become edematous; the throat, in fact, soon fills with secretions more than when those growths are not present.

Since a clear operative field is important for proper work, I have devised a blood and mucus ejector, the vacuum of which is formed with an ordinary laboratory suction-pump run by city-water pressure. A tube being placed in the mouth, the secretions and blood are drawn through it into a bottle, thus making it possible to see at a single glance the exact amount of secretion and blood being lost by the patient, as well as to have a dry field of operation.

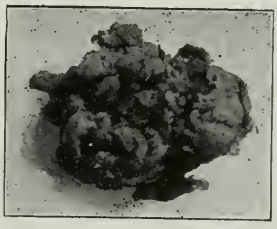
Team-work is valuable in this kind of surgery, and so the same nurse, so far as practicable, should always take the same part. One nurse holds the tongue-depressor, another attends to the instruments, while the anesthetist keeps the head in proper position. The anesthetist should be free to hold the head, while the nurse on the opposite side of the table from the operator should drop the ether on the mask—or watch the gas-cylinders, if nitrous-oxide gas is used.

The Operation of Enucleating Tonsils With the Patient Upon the Side

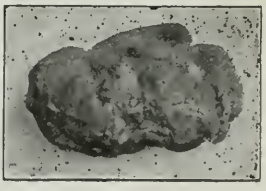
Operate on the upper tonsil first; it will be found in clear view. The light will strike that side of the throat, and everything is in proper position for the instruments. Swab the throat with a 4- or a 6-percent cocaine solution and thus anesthetize the lining membrane of the mouth and base of the tongue, thereby preventing the nausea and gagging often caused by the tongue-depressor—a most disagreeable interference during the operation.

After introducing the tongue-depressor, grasp the body of the tonsil with a vulsellum-forceps and gently draw it toward the center of the throat. Introduce a Tyding's curved tonsil-knife into one of the uppermost crypts, or at the junction of the upper margin of the tonsil and the arch connecting the anterior and posterior pillar, then thrust the point of the knife into the supratonsillar fossa. The point of the knife will not appear to be very deep in, and, in fact, it is only below the mucous membrane; still, it should be behind the pillar and outside of the tonsil-capsule.

Now, with a turn of the knife and a downward stroke, carry the point behind



Tubercular tonsil



Base of adenoidal mass, showing distinct capsule.

Removed with tonsillotome; note incomplete removal.

Tonsils removed within their capsules.

Fig. 7. Types of Tonsils After Removal.

the anterior pillar—which you will see plainly—until certain that you are at the lower margin of the tonsil. Having done this, place the knife back in the same position as at first, but turn the point in the opposite direction and come downward in front of the posterior pillar, which is on the opposite side of the tonsil, continuing till opposite the base of the tongue, where you should connect with the first cut. The capsule of the tonsil will thus be completely divided all around the gland-body on its anterior surface.

Now remove the vulsellum-forceps; introduce the index-finger into the supratonsillar fossa; separate the tonsil from its bed as cleanly as possible; if possible, separate each pillar from the gland. There will be considerable bleeding at this stage, but not enough to cause alarm. Grasp the partly loosened tonsil with the vulsellum-forceps.

Watch every step at this stage. Be not satisfied with a hold you have taken on the tonsil while lying buried under a clot of blood. Do not trust to your fingers instead of your eyes, unless you have had my large experience. See what is being done, even if it takes a few minutes longer—a little time is nothing as compared with an injury to the pillars, which are so important to the proper action of the throat. If perchance (unintentionally) a section of the muscle and possibly the uvula is removed, inexcusable injury is inflicted upon the throat, yet while exercising the greatest care, I have had this accident happen more than once.

Managing the Snare

With the body of the tonsil properly under control by means of the tonsil vulsellum-forceps, slip the loop of the snare-wire over the handle of the forceps, down the stem and around the tonsil, the wire being made to enter outside of the capsule, between it and the pillars. Press the loop down and back, and slowly tighten. Do not pull on the tonsil with the forceps; simply hold it steady. When the loop begins to tighten, release all tension on the forceps, lest some of the posterior pharyngeal muscle-tissue be drawn forward into the loop as it closes and thus take out a section. When this accident happens a most intractable bleeding is almost certain to result. The snare should be closed very slowly, giving the wire ample time to separate the capsule from its muscular attachment and the bed from which it comes. Use the threaded portion only with which to close the snare loop while it is around the tonsil.

Snares with pistol-shaped handles are not to be recommended, as the loop is not perfectly under the control of the operator. When using a snare of this kind, it many times happens that while trying to proceed slowly the wire suddenly cuts through the tonsil, leaving a portion of the tonsil and its capsule in the throat, thus making an incomplete operation. The remains of a tonsil, under such circumstances, must be removed with scissors. The quicker the snare is closed, the greater the bleeding. After each tonsil comes out, immediately hold in the tonsil fossæ a sponge soaked with adrenalin, and keep it there for a few minutes under pressure.

Having proper light, the patient being in correct position, and the throat made dry with the ejector, raise the anterior pillar and inspect the whole floor of the tonsil cavity, which should be a clean socket cavity. If bleeders are present, they can easily be seen and pinched; but it is a very rare occurrence that a vessel has to be pinched if the technic outlined has been properly followed.

When fully satisfied that all bleeding is checked, turn the patient upon the other side—which, with a platform on the table, is done in an instant. The second tonsil then is removed in exactly the same manner.

The removal of tonsils by this procedure takes more time, but—as I already have said—a few minutes more is nothing compared with poor results, or leaving in the throat a portion of a diseased tonsil that will bother the subject nearly as much after the operation as before, or permanently injuring the pillars or the uvula.

Removal of Adenoids

Adenoids, if present, are the next to be cared for. But right here I will say that,

unfortunately, more adenoids are improperly operated upon than any other portion of the human body.

Nearly every general practitioner in this country removes or attempts to remove adenoids; and, for my part, I am glad they do, even if some fail to do it properly. It is a good thing for the public that they do it as best they can under the circumstances; for even an incomplete removal of the growths helps these children wonderfully, in that it lessens their sufferings and prevents in some degree the troubles that would develop, as they grow up, if the adenoids are not removed. Parents often cannot afford to take the ailing child to the hospital, neither will they bring it as a clinic patient; frequently, however, they are willing to have their family doctor perform the operation, and this he is glad to do rather than allow such a child to grow up, a victim of neglected adenoids.

Now as to the mode of removing these growths. By many, the use of the curette is preferred to remove the projecting fangs of the adenoids. Adenoids have a capsule at their bases, very much like the tonsils, and, in order that a perfect result may follow their removal, this capsule as well as every vestige of adenoidal tissue must come away, leaving the throat clean and free to heal over with a healthy mucosa.

Having come to the conclusion that there is no hemorrhage from the bed of the second tonsil, just enucleated, remove the tongue-depressor and, with the patient in the same position upon this side, locate with the finger of one hand the mass of adenoidal tissue. With the other hand, now introduce a Juracz forceps, closed; then, placing the blades directly over the adenoidal mass, open the forceps till they come near the eustachian-tube openings on each side.

With the patient's head held firmly in the arms of the anesthetist, push back hard, force the forceps back to the bony wall, till the forceps comes in contact with what feels like hard bone. The blades, when closed, will follow below the adenoidal mass near the periosteum, if held back. Close the forceps as tightly as possible.

If an endeavor is made to remove the forceps at this time, you will find that it cannot be done without opening it, as pinching alone will not separate the adenoidal mass entirely; if the forceps is opened, a portion or all would be left behind—the very thing that is not desired.

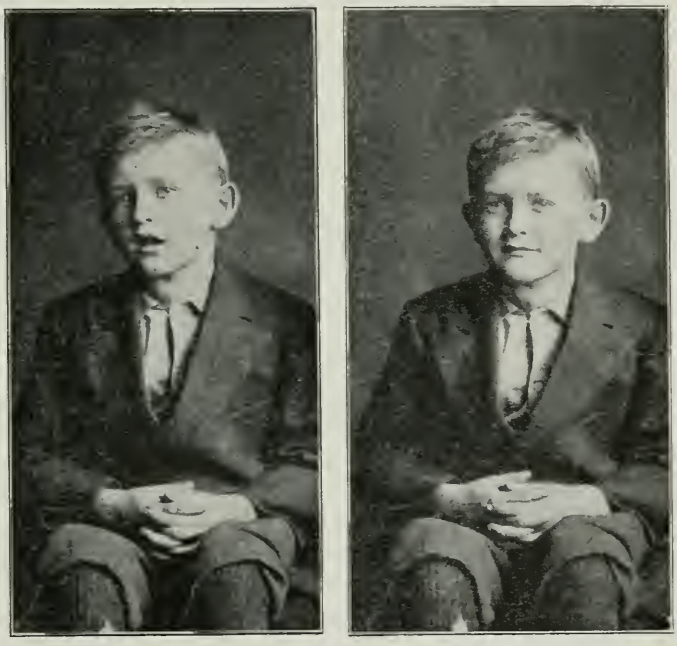


Fig. 8. Before and after operation for adenoids.

Being positive that a portion of the bony septum is not within the grasp of the forceps, twist from one side to the other, holding together as tightly as possible until the blades cut through and come away. Within the jaws will be the adenoidal mass in one piece, the base of which will have a glistening capsule. Now introduce the index-finger and, with a small curette, remove any small tags that may remain. With the other hand, introduce, through each

nostril, a nose-curette and make sure, before quitting, that the roof of each vault is perfectly clear and free from adenoidal growths.

Finally, take a swab upon a long dressing forceps and swab out the mouth with cold water till all bleeding stops, which will be only a few minutes. Remove the mouth-gag, bathe the patient's face with cold water, and all is done.

When nitrous-oxide gas is employed, from which the awakening is very quick, the patient must be removed from the operating room at once, lest he be frightened at the sight of the blood, which causes many to become nervous.

Keep the patient quiet in the hospital the rest of the day, sending him home in the evening if he lives in the same city and everything is favorable, but giving positive instructions that he must not exert himself much for a few days. This is all the postoperative treatment required, except that it is advisable to keep the throat as clean as possible with salt water or some antiseptic gargle.

The general health of such patients will show a marked improvement after the sixth week. Do not expect results too soon; if you do, you will be disappointed. It takes four weeks for the blood to free itself from the accumulated toxins and for the throat to become sound and well. It will take even longer than this for some children to quit holding their mouths open, which has become a habit. However, in six weeks from the date of operation, marked inprovement in the general health shows itself whenever the case is correctly managed.

The Treatment of Sexual Impotence in the Male

By WILLIAM J. ROBINSON, M. D., New York

EDITORIAL NOTE.—In previous numbers of CLINICAL MEDICINE *Dr. Robinson has discussed various phases of the problem of male impotence. He now comes to the most important phase of this subject—the treatment. This paper is sure to be read with very great interest.*

BEFORE proceeding to a systematic exposition of the varied problems of the management of sexual impotence in the male, I prefer to give the histories of two or three cases, outlining at the same time briefly the methods of treatment. This will give the impatient readers of THE AMERICAN JOURNAL OF CLINICAL MEDICINE some idea of the subject.

Case 1. Age 22. A typical case. He suffered with bed-wetting until the age of 10. Masturbated moderately and intermittently from the age of 13 to about 16. At about 15, began to suffer with night emissions; first every two or three weeks, then every week, then twice a week and even oftener. Felt tired and languid in the morning, i. e., after an emission. Some six months previously, applied to a physician, who gave him bromides and advised him to attempt intercourse. He did, but had an immediate ejaculation, without any erection. Three or four more attempts proved just as unsuccessful. In the meantime the pollutions kept up with the same frequency.

When he came to me, he was thin, pale, emaciated, with an awkward gait, and a restless, wandering look. His memory was weak, and he was painfully lacking in power of concentration. He had passed the junior examinations in the New York College of Pharmacy, but in the senior year he found it impossible to prepare the lessons, and left college until his health should improve. He had a wo-begone expression, and his outlook on his future was decidedly pessimistic.

I assured him in the most positive terms that I could cure him unquestionably, provided he would put himself entirely in my

hands and without reasoning or questioning do whatever I ordered. He was only too ready to accept the terms. Such weak characters need a superior will, and they at once feel better as soon as they know there is a stronger personality to guide them and to order their life. Unrestrained, unfettered liberty is not everybody's ideal.

I examined him, and, although I had given him no treatment that morning, he left the office in a much better, more hopeful mood than when he came. The first two months the treatment was general —I told him he should forget that he had any sexual organs—and consisted in the ordering of iron, nux vomica, syrup of hypophosphites, glycerophosphates, warm and cold baths, rectal enemata of cold water, plenty of meat, raw eggs in the morning, and other measures. He gained about ten pounds, his anemia disappeared, and he looked and felt brighter.

I then proceeded with the local treatment. The posterior urethra was quite sensitive and so was the prostate gland. The urethra was treated with steel sounds, Kollmann's dilators, urethral psychrophores, instillations of hydrastine and of silver nitrate; the prostate gland was very gently massaged twice a week, followed once a week by faradization and once a week by hot and cold rectal applications. He was also given rectal suppositories consisting of ichthyol, antipyrin, and atropine, to be used each night on going to bed.

After six months' treatment, he attempted intercourse, which, however, was not fully satisfactory. The erection was strong, but subsided quickly and was followed by a premature ejaculation. Treatment was continued off and on for another year; it was interrupted for three months during my annual vacation in Europe. At the end of this period, the man was perfectly well. He was an entirely different man both physically and mentally. Intercourse was perfect so far as erection, duration, and sensation were concerned. He married six months later, and is now living a happy married life.

This case is not in any way unique. On the contrary, it is one of common, everyday occurrence, and well illustrates what can be done by persistent judicious treatment. Had this man fallen into improper hands or had he married before a complete cure had been effected, he would have had a life of misery to look forward to, misery for himself as well as for his wife; and, knowing his sensitive character and his tendency to pessimism and melancholia as well as I do, I feel quite certain that sooner or later he would have terminated that life of misery by his own hand.

It was the good luck of the patient that he was well-to-do and could afford prolonged and expert treatment. But what are the poor—the workingmen, clerks, small business men, and the others—to do, when they are afflicted with impotence? The hospitals will not receive them, and the treatment dealt out to such patients in the dispensaries is worse than useless.

Case 2. Age, 28 years. Had masturbated from the age of 13 or 14; occasional intercourse from the age of 24. Weak sexuality in general. Lately began to notice diminishing potence; weak erections, premature ejaculation. Never had venereal disease. Examination disclosed very narrow prepuce; patient stated that he had not retracted it for years. Retraction, which was accomplished with considerable difficulty, disclosed an accumulation of smegma, of a foul, sickening odor, and several preputial calculi; several small ulcerations appeared on the superior surface of the glans.

I instituted a thorough cleansing with soap and warm water, then with hydrogen-peroxide solution; then touched the ulcerated spots with a 10-percent solution of silver nitrate. I ordered washing with hydrogen peroxide solution three times a day, then dusting with an antiseptic powder. In a week the balanoposthitis was completely healed.

I ordered abstinence from intercourse for two months. In the meantime warm sitzbaths at night and cold baths in the morning were taken. No internal treatment of any kind was given. At the end of that period the man tried intercourse, and with perfectly satisfactory results—in fact, more satisfactory from every point of view than ever before in his life. He has

given up masturbation entirely and is living a normal sexual life.

Case 3. Age 35. Single. Had ived a normal sexual life from the age of 22, having intercourse regularly once a week to once in four weeks. Never had any venereal disease. For the last year he noticed premature ejaculation and diminishing libido; felt well otherwise. Led a sedentary life. Investigation disclosed the fact that he had always suffered somewhat from constipation, but that the condition had become considerably worse during the past year, and he had also begun to develop hemorrhoids. The prostate gland was not enlarged, but somewhat painful to the touch, and slight pressure caused prostatic secretion to appear at the meatus. I considered the entire condition due to his constipation.

Treatment: An enema of warm water with soap-suds at night, followed by a rectal injection of 8 ounces of cold normal saline solution, retained in the rectum for ten minutes. In the morning a mild saline laxative, alternated with rhamnus purshiana, and aloin, strychnine and belladonna pills. Massage of the prostate gland once a week was done for four weeks. There was no treatment of the urethra. After six weeks' treatment, there was complete recovery.

Case 4. Age 32. Married one year. An all-around athlete. Masturbated from the age of 15 to 18, when, being informed of the unjuriousness of the habit, he gave it up definitely. Had intercourse at the age of 20, and two years later contracted gonorrhea, which lasted eight months and was accompanied by prostatitis. Became engaged at the age of 28, from which time until his marriage—a period of three years —he abstained from intercourse. Immediately after marriage he found that the performance of the act was unsatisfactory, but, as his bride did not seem to be dissatisfied, he delayed attending to himself. Lately, however, he had noticed a distinct aversion on her part to his approaches and had also perceived that intercourse left her irritable and complaining of backache, headache, and so on.

His complaint was lack of libido, premature ejaculation, sometimes even before intromission, a scalding feeling during the emission, and a sense of lassitude after the act. But, while the purely physical desire for the act was diminished, the *mental* desire remained as strong as ever; if anything, it was increased.

Findings on examination: Posterior urethra exquisitely painful; prostate gland somewhat enlarged, boggy and painful; abundant secretion readily expressed. Testicles and epidydimis not enlarged, but tender to the touch. No gonococci, no shreds in the urine.

Treatment consisted first of all in forbidding any attempt at sexual intercourse "until further notice." I gave him to understand that this was a *conditio sine qua non*, and told him that I would not take his case unless this condition was absolutely complied with. He agreed. I then gave him 1 milligram (1-64 grain) of atropine sulphate three times a day. This often relieves congestion of the posterior urethra and the neck of the bladder very markedly, a fact unfortunately not well known to the medical profession.

A week later I began cautiously the passing of steel sounds; starting with No. 18 French, and increasing the size gradually until at the end of three months I was able to pass a No. 29 French easily. The sounds were passed twice a week. Besides, he had his prostate gland massaged and faradized once a week; once a week he had 3 minims of a 1 : 100 silver-nitrate solution instilled into the posterior urethra, and once a week the solution of strychnine and hydrastine.

At the end of three months' treatment he was advised to attempt intercourse. There was a very decided improvement in every respect, but it was not perfect. The ejaculation was still somewhat premature. I told him he would have to continue practically the same treatment for three months more, during which time he must abstain. He obeyed for two months, but at the end of that time he broke the injunction and had relations with his wife, which were highly satisfactory to both parties. He continued treatment for another month, and since that time he has been in perfect health.

Fallacies About Neurasthenia

By THOMAS G. ATKINSON, M. D., St. Louis, Missouri

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FOR some time past, there has been a growing suspicion abroad that neurasthenia is a fraud—worse than that, a myth stalking as a reality. As with the child and the story of Santa Claus, the nearer we approach it and the more we learn about it, the more apparent it becomes that it has no real existence. Or like the yokel who saw the giraffe for the first time, we are coming to say, "There ain't no such animal." Testimony upon testmony is coming in tending to show that we have allowed ourselves all these years to be fooled by an unembodied bogy. Not that there is no such condition as the one which we have called neurasthenia—that is all too real for denial. But it is beginning to dawn upon our awakening intelligence that we have been investing it, in our minds, with an identity which it does not possess and mistaking the shadow for the substance.

I am not quite prepared, yet, to deny point-blank the existence of neurasthenia "as she is taught," and get away with my denial. I think I could argue a pretty good case, but not altogether a complete one; and prejudices die hard. Some day I may attempt that larger task. For the present, I mean to waive the question of identity and to content myself with showing up a few of the fallacies in our concept and treatment of neurasthenia, which I have reasonable hope of making my reader see—at least those of them who are not hopelessly committed to established ideas.

Fallacious Theories About the Etiology

The place to begin is at the beginning. Therefore, the first fallacy I shall speak of is one which pertains to the etiology of neurasthenia.

It is popularly held and solemnly taught that the condition results from certain traumatic factors which we group under the name of "strain." I unhesitatingly pronounce this idea to be erroneous. I further unhesitatingly assert that no previously healthy person ever becomes a neurasthenic. I affirm that one can no more make a neurasthenic out of a healthy person than you can make a querulous weakling incompetent out of a naturally resolute level-headed man in business. As a rule, stresses only strengthen such a man. If you bear hard enough on him, however, you may break him; you may completely unnerve him—we have all seen that done; but turn him into a shiftless incompetent, never. So you may break down a healthy set of nerves; you may altogether demoralize them; you may have nervous prostration; but you will not have neurasthenia.

The neurasthenic individual is born, not made. He is, from his mother's womb, a physical and mental unfit—a shiftless potterer in nerves, just as some men are in business—and strain or stress does but show him up.

A second fallacy relates to our concept of the nature and seat of the trouble—our disease-picture.

Neurasthenia is not an exhaustion of nerve function or a toxosis of nerve-tissues. So far as I know, the nerves of neurasthenic persons receive and respond to a stimulus as well as those of anyone else, nor has any histological difference ever been demonstrated in the nerve-t issue.

With all due respect to my friends who have been teaching autotoxemia as a cause of neurasthenia, I do not take any stock in the doctrine, except in the sense of a vicious circle. Autotoxemia from retained waste products is primarily a result, not a cause, of neurasthenia, due to faulty innervation of metabolism and elimination. So with indigestion, insomnia, and all the train of other symptoms. To read into

them a causal significance is, I am sure, putting the cart before the horse.

The whole trouble is a misuse of nervous income. Now, the misuse of nervous income is not a matter of nervous tissue or of function any more than business success or failure is a matter of opportunity or money. Business "failures" have just the same opportunities and money as business "successes." The difference is in the way they utilize them—and that is a matter of temperament or habit.

So, then, neurasthenia is not a defect in nerve-tissue or in functionation, but a matter of nerve "habit," a subtle and intangible thing of heredity and mind. In short, it is not a condition of the nervous system in particular, but of the whole body-economy. Given a certain stewardship, represented by the entire body-mechanism, and the neurasthenic is inherently incapable of running it at a profit, just as the business failure, given a certain capital of money and opportunity, muddles and fritters it.

The third, and last, fallacy of which I shall speak here is that of current treatment. It might be supposed that this grew naturally out of the two preceding fallacies; but such is not the case, for there is nothing even in the erroneous premises to which I have referred to justify the therapeutic fallacy that I am now about to expose.

Some Therapeutic Fallacies

There are two principles prevailing in the doctrine and practice of the treatment of neurasthenia, both equally irrational and fallacious; namely, that of direct nerve sedation and that of direct nerve stimulation, represented, respectively, by the use of bromides and of strychnine. How in the world either of these principles or either of these drugs can have gained currency, even on the prevalent idea of nerve exhaustion, passes my comprehension.

If, as we are asked to believe, the nerve-tissue and its capacity are below par, poisoned by toxins, then, assuredly, it can not be rational therapy to depress and stultify them still further with a combination of two such toxic drugs as potassium and bromine. And if, on the other hand, the irritable symptoms of neurasthenia be the expression of a deficient nerve-system working against odds, then to whip it into still further frantic effort with strychnine is the worst kind of therapeutic folly.

The truth is, the neurasthenic requires neither sedation nor stimulation—at least not of a direct or forcible nature. The business ne'er-do-well is not helped either by petting or by putting money or opportunity in his hands. What he needs is a guardian, a manager to manage his affairs, so that he may be kept reasonably free from debt and muddle. So the nervous ne'er-do-well needs, not sedatives or stimulants, but a careful regulation of all his body-economies in such a fashion that his modest nervous income will be laid out to the best possible advantage and with the minimum of friction.

Rational Conservation of Nervous Energy

How shall this be done? There is no cut-and-dried method; no hard and fast rule. Each case is a law unto itself; and it is characteristic of these patients, as it is of all types of shiftless persons, that they do not exhibit their shiftlessness in the same direction two days running. For several days at a time, they often display a temporary efficiency in utilizing and managing one or two departments of their economy, and do finely in this direction; then, like the business incompetent, they give up the effort, renewing it in the same fitful way in other directions.

Hence, the intelligent therapy of this condition demands periodic supervision, changing treatment from time to time as the shifting phases of the patient require, and always on certain principles which apply to the helping of all ne'er-do-wells.

One of these principles is not to help them more than is absolutely necessary, but to let them help themselves as much as possible. Another is, that, when help is needed, it should be given in small, frequently repeated, judiciously placed doses rather than in large quantities. To the capable, energetic business man temporarily pressed, it is all right to give large

sums of money and other heroic forms of aid. But for the constant potterer, such a course is manifestly worse than letting him alone.

Translated into actual therapeutic terms, then, what is the rational treatment of the neurasthenic? Briefly, to regulate, by whatever means seem most appropriate (preferably not drugs), whatever phase of his or her disordered, mismanaged body-economy needs help at the time. It may possibly happen that, in carrying out this plan of treatment, the slight and temporary use of such drugs as strychnine and the bromides may be occasionally called for. They will far oftener *seem* called for. But their routine or cumulative administration, I reaffirm, is *never* called for in neurasthenia

The remedies which, here, are most frequently indicated are the gastrointestinal cleansers, the metabolic alteratives and eliminants, and the nerve-tissue nutrients, of which saline laxative, colchicine, and neuro-lecithin, respectively, may stand as typical samples; but others will, of course, suggest themselves.

There are good and sufficient reasons, peculiar to the situation, why concentrated active principles are highly desirable. In a condition where minimal medication is indicated, it would hardly seem necessary to point out the unwisdom of administering drugs the remedial principles of which are complex and largely problematical. Single drug principles, in active, definite form, are alone amenable to such minimal control.

The Physician and His Attitude Toward Religious and Ethical Questions

By E. S. GOODHUE, M. D., Kailua, Hawaii

IT is generally remarked, if not believed, that, as a class, physicians are materialistic, and personally indifferent to religious and spiritual betterment of mankind; that their study of the body and their emphasis upon its physical ills have made them disbelievers in God. Men have naturally inferred that the scientific spirit is incompatible with the religious spirit, and that where the one prevailed the other must inevitably disappear.

I think that this impression, which with some has hardened into conviction, is a misconception due less to prejudice than to want of consideration of the subject.

From the orthodox point of view, it is easy to consider a man or a class of men as materialists, atheists, infidels or disbelievers, when they are only reasonable doubters of dogma. In fact, the most of those who have been termed "infidels" by an unthinking world were not so, but men of such sincere religious convictions that they were unable to accept the artificial creed of their day. Such a man was Servetus, a Unitarian in all essentials. Darwin, by some even to this day called a "gross materialist," was nothing worse than a Unitarian, and his gentle, consistent life was evidence enough of the ethical adequacy of his beliefs.

With men, as with children, calling "names" is pretty generally a matter of ignorance, unthinking prejudice or hostility.

To a certain really good, old-fashioned Methodist minister I know, every one who doubts the Diety of Jesus, or the "inspiration" of the Bible, or that Jonah lived in the whale's belly, or that Moses received the commandments from God's hand is an infidel—and many other are of his way of thinking.

This, then, is one of the reasons why medical men are looked upon as unchristian in their beliefs at least.

It may be acknowledged at the outset that, as a class, their studies and habits of thought as well as their human contact with their fellow men have dispossessed them of whatever orthodox tenets they may

have held and forced them into the ranks of religious liberals. They have urged the right of every man to the conclusions of his own thinking, in religious as well as medical matters; and their training has enabled them to separate pure emotion from pure spirituality.

In reading over the biographies of physicians and from observation in my association with medical men, I am inclined to believe that the attitude of most physicians toward religion is a reverent one; that their religious convictions are sincere, and their interest in religious, ethical, and even theological subjects is general and deep, considering the professional demands made upon their time and strength. It even appears that not a few of our profession have made their share of contributions to theological literature.

Why Physicians Largely Believe in a Supreme Being

Upon consideration, we should not be surprised, perhaps, but rather expect that men whose lives are given up to the study of this wonderful body of ours, and its more wonderful mind; who have devoted themselves to the prevention, correction, and elimination of the disorders which deface and destroy both body and mind—would feel a deep interest in a subject so closely connected with mind and body.

We must accept as a truism, that without religion of some sort the mind of man is like an unmoored ship—it remains restless and unstable.

Not only this. The true physician's attitude toward all humankind is one of sympathy; he comes as near to death in all its phases as a healthy man may, and his heart many a time is torn by anguish of another's suffering, physical as well as mental; he learns by intimate contact with men what the sins of the father bring in their wake, and how physical transgressions are visited upon the third and fourth generations. He realizes, as few can, how brave and cheerful minds can continue bravely and cheerfully to exist in bodies doomed to gradual and painful decay; how insanity, "moral depravity," original sin, and much of the "wickedness" supposed to be inherent in men are due to bodily disease, and to nothing else; how "criminal tendencies" and vice in children can be referred to some woful lack in the development of their sensitive organisms.

The ancient Greeks said, "The true physician is God-like." While, of course, he may not always be of that high order, he certainly must be impelled to respect and reverence a being who is worshipped as a benign father by so many needy creatures.

Not only do I believe that there is nothing whatever in the study of science or in the practical work of scientific investigation to lead one away from God and a sincere faith in a reasonable religion, but I am convinced that there is much in such occupations which tends to develop a reverent, religious spirit; and I do not understand how a conscientious physician who is engaged in the practice of his profession can be otherwise than deeply religious. But he certainly does try to get down to the substance of beliefs—he acquires a contempt for the husks and hulls of things. The kernel he must have in religion the same as in other matters, and to him the scriptural definition of true religion seems to cover the ground: "To visit the widowed and fatherless, and to keep oneself unspotted from the world."

A Few Examples From Life

Without going into an exhaustive study of details, for which I have neither the space nor the preparation, it may be interesting and suggestive to consider the names of a few physicians whose work is more or less familiar to intelligent readers.

In the faculty of my own school, among some twenty-seven physicians and many of these of world-wide reputations, there was only one who could be called ultra liberal. He was an agnostic. The president of the institution was a Unitarian, as were several of his associates; one was a deacon in a Baptist church, and another a prominent Presbyterian worker. One preached us a sermon on "immortality," at our annual exercises, and in the lectures there were numerous thoughtful and reverent allusion to God and religion. But all his appeals were referred to reason; the sug-

gestion was that we ever give to religious matters the same careful thought and study that we gave to the understanding of the body.

Of the eight hundred men who have gone out from this school, with more or less adequate equipment for their work, there are only a few (and those are without any serious purpose in life) who are not in the real sense religious. Some, indeed, have gone into the ministry, and all, I think, feel that their work, in large measure, is to visit the widowed and the fatherless, for the sake of the brotherhood.

In the very earliest times, medicine and theology were closely related—enshrouded, we might almost say, by superstition.

The little that we know of Hippocrates (B. C. 460) entitles us to call him a metaphysician as well as physician; theologian as well as physicist. Probably there were grounds for calling one of the biographers of Jesus the "beloved physician." Thus Harnack says of Luke, the disciple:

"His medical professions seem to have led him to Christianity, for he embraced that religion, in the conviction that by its means and by quite new methods he would be enabled to heal diseases and drive out evil spirits, and, above all, to become an effectual physician of the soul. Directed by his very calling to the weak and wretched, his philanthropic sympathy with the miserable was deepened, in that he accepted the religion of Christ and as a physician and evangelist proved and proclaimed the power and efficacy of the name of Jesus and of the Gospel. It seems to me that no doubt can exist that the third Gospel and the Acts of the Apostles were composed by a physician."

Discussing this same follower of Jesus, Dr. George Homan writes:

"It was given to him [Luke], through intellectual, moral, and spiritual powers never excelled, to lay deeper the foundations of his chosen faith in the consciousness of mankind than any other, or all others, of his coworkers—this being made possible by his true understanding of an appeal to child-nature, and a sense of sympathy and fellowship as a physician with the maim and sick, the halt and the blind. Jesus himself, if he did not perform all the miracles credited to him or in the manner reported, was certainly interested in the clinical side of medicine, and held some of the errors common to the physicians of the day, as we may see in his allusions to insanity and leprosy."

Aetius of Mesopotamia (502 A. D.) was the first medical man of his age to profess Christianity, and he always used "invocation" along with other therapeutic measures.

D. Benedictine (1058) was the first physician who afterward became pope. He wrote four books on healing, founded a hospital, and provided shelter in his monastery for Constantine, another Christian physician, who wrote a book on medical essays.

Indeed, in the middle ages, preaching the gospel and the practising of medicine were required of the priests, and out of this dual office came the orders of St. Mary, St. Lazarus (hence lazaretto), St. John of Jerusalem, and all the Daughters of God, with all the hospitals that are connected with them.

We have a good record of Guy de Chauliac (1300), a famous physician who became chapel-reader for Clement VI at Avignon. Chauliac was quite liberal for his time, and the following from his medical essays is good ethics even for the present day:

"Let a physician be learned, expert, ingenious, bold where he is sure, timid where he is in doubt, avoiding bad cures and practice, being gracious to the sick, generous and compassionate, wise in prediction, but chaste, sober, pitiful and merciful; not covetous, not extortionate, but receiving moderate fees, according to circumstances of his patients, the character of his case and of his own dignity."

Our attention has been called anew to Servetus (1511) by Dr. Osler's sketch of his life: A learned man, physician, scientist and theologian. He practised medicine at Avignon and Charlieu, then took a postgraduate course at Montpellier, resuming practice at Vienna. He also took a course in theology at Louvain. Servetus was the first physiologist to notice that there were no bones in the heart, and that the

walls between its cavities were not porous —a very important observation, which anticipated the discovery of the circulation of the blood.

Dr. Joubert, France (1529), who practised medicine and wrote a book on "Popular Errors," taking a stand much in advance of his day.

George Von Parris (1551), a doctor who proclaimed his Unitarian belief and was burned for it at Smithfield.

A little anterior to this event celibacy, which had been required of physicians as well as of priests, was no longer required of healers, and the two, medicine and theology, dissolved official partnership, much to the advantage of both.

George Blanduata, physician and active Unitarian, who fled to Geneva, in 1554, to escape the Inquisition.

Paolo Alziati, contemporary of Blanduata, who wrote and worked with him in the Unitarian cause.

Severino (1580), a physician and theological writer, driven out of Naples by the Inquisition.

Thomas Browne was born in London, in 1605, and became a celebrated physician and author. He practised at Norwich, and wrote on medicine, his "Religio Medici," "Mescellany Tracts," "Christian Morals," and other published evidences of his deep interest in the spiritual welfare of his fellowmen.

John Bulwer (1654), less known but an active physician and philanthropist, who wrote "The Deaf and Dumb Man's Friend."

John Clark (1609), physician and publicist; one of the founders of Rhode Island and the founder of Newport. He organized the Baptist church, of which he became the pastor in 1644.

Jean Astrue (1684), physician, lecturer and writer, whose avocation was theology. He is best known for his great work, "Conjectures sur les memoires originaux, don't-il paroit que Moyse s'est servi pour composer le livre de la Genese." This book, published in Geneva in 1753, is acknowledged to be the basis of our modern criticism of the Pentateuch.

Cadwallader Colden (1688), physician, publicist and educator. His correspondence with the leading scientific men of the day shows him to have been an advanced thinker upon religious subjects.

Dr. Stahl of Jena (1734), physician and author. "He was a great pietist, faithful to his laboriously acquired convictions; indeed, he regarded his convictions as revelations from God."

Ph. Pinel (1745) was a great physician and philanthropist, who bravely advocated reforms in the prisons and the more humane treatment of prisoners.

William Hunter (1718), first a theological student, he afterward became a distinguished scientist and medical writer, but who never forgot his first love.

Edward Jenner (1749), son of a clergyman and always deeply religious. Park says: "The idea of vaccination so struck Jenner as a means of affording protection to the whole human family that the subject never left his mind."

As is well known, Darwin's father's father, Erasmus Darwin, was a physician (1731). His philosophical treatises show his liberal spirit, and much that he wrote was condemned by the orthodoxy of the time.

We have our own Benjamin Rush (1745), contemporary and friend of Franklin and Jefferson, who, like his friends, was a liberal in belief.

We must not forget Joseph Priestly (1733), who belongs to us because of his residence among us as well as for his active Unitarianism; a great physician, associate of Erasmus Darwin at Birmingham in all good works, and discoverer of oxygen.

John Mason Good (1764), who was a kind and able physician as well as a writer of books. His "Nature of Things" and "Study of Medicine" are well known. His invocation, called "The Great Doctor's Prayer," is worthy of a place here:

"O Thou great Bestower of health, strength, and comfort!

"Grant thy blessing upon the professional duties in which this day I may engage. Give me judgment to discern disease and skill to treat it; and crown with Thy favor the means that may be devised for recovery; for with Thine assistance, the humblest instruments may succeed, as without it the ablest must prove unavailing.

"Save me from all sordid motives; and endow me with a spirit of pity and liberality toward the poor, and of tenderness and sympathy toward all; that I may enter into the various feelings by which they are respectively tried; may weep with those that weep and rejoice with those that rejoice. And sanctify Thou their soul as well as heal their bodies. Let faith and patience and every Christian virtue they are called upon to exercise have their perfect work; so that in the gracious dealings of Thy spirit and of Thy Providence they may find in the end that it has been good for them to have been afflicted."

John Abernethy (1764), "a physician whose personal bearing and broad religious views, freely expressed, made him a well-known and impressive personage."

Thomas Beddoes (1760), physician and essayist, author of "Essays Medical and Moral."

Benjamin Brodie (1783), a distinguished physician, who wrote "Psychological Enquiries."

Thomas Brown (1778), who found himself inspired by his medical studies to take up philosophy, ethics, and poetry. His support of Hume's theory of causation made him the object of abuse from the orthodox.

John Brooks (1752), a physician of Massachusetts, who practised at Reading, then entered the Patriot Army. Was governor of his state, 1806–1823, and president of the Massachusetts Bible Society.

Henry Dearborn, of New Hampshire (1751), a liberal physician, who was secretary of war under Jefferson, and who took an active part in religious and educational matters.

John Jebb (1786), a physician of Cambridge, England, who joined Lindsey's secession movement out of the established church.

John Thompson, M. D. (1783), founded the Unitarian Fund for Mission Purposes.

John Dalton (1766), eminent physician and physiologist, was very active in literary and ethical work, in Manchester, in his day, and a pronounced liberal in religion.

Josiah and Joseph Goodhue (1759 and 1764), both physicians in Massachusetts; patriots, and active supporters of liberal religion.

Dr. Henry Calloway (1817), entered the ministry after practising medicine for several years; later became Bishop of Kaffraria and wrote, "Religious Systems of the Amazalu."

John Brown (1810), physician and ethical writer. Best known for his "Rab and His Friends," and "Our Dogs."

The following physicians were all distinguished as educators, ethical writers or philanthropists:

Joseph Warren, J. C. Warren, Combe, Sir Jas. Clark, Alonzo Clark, S. G. Howe, F. B. Hough, Gross, Wells, Cooper, O. W. Holmes, Sir W. Fergusson, Austin Flint, John W. Draper, J. C. Holland, Sir A. Clark, Maudlesley, Thompson, Sir Joseph Lister, B. Hale, Lawson Tait, William James, and many more.

Riddles Solved by Typhoid Tests

From the Records of My Private Laboratory

By B. G. R. WILLIAMS, M. D., Paris, Illinois

EDITORIAL NOTE.—This is the seventh paper in Dr. Williams' very interesting series of articles upon "Surprises, Delights and Curiosities Encountered in Medical Laboratory Work."

VII. Riddles Which the Typhoid Tests Have Solved

THERE is an anecdote, told about Beranger, the French poet, which runs somewhat as follows:

"What, Monsieur Beranger," asked a lady one day at dinner, "you drinking water—you who have sung so well the pleasures of wine?"

"Ah, madame," was the Frenchman's quick response, "'tis my Muse who drinks all my wine."

Widal, diazo, Russo tests—these are words constantly on the tongue of every doctor. They are discussed in the medical societies, glorified or damned in the journals, and debated in consultations; but their practical application, like Beranger's wine—is often left to the muse.

Quite in contrast, stands out the work of Gambill and Hawley, of Watertown, Illinois; and it is with pleasure that we read the experiences of these two physicians. Instead of debating the value of the typhoid reactions, they have been trying them out—all of them—side by side; and the report of their observations, in *The Illinois Medical Journal* for May, 1912, is certainly worth the reading.

In this communication, I can but select a few cases in which these tests have been applied—instances where actual experience has brought forth valuable information. Used separately, any one of these typhoid tests—so I have decided—fails to give satisfactory results. Taken together and repeated at intervals during the fever, they rarely or never fail to lead to valuable diagnostic and prognostic conclusions concerning the disease-process at hand. Just how this is done, and the value and limitations of the interpretation of the respective reactions, does not find a place in this paper, my attention being confined rather to the specific applications.

I recall one case—and this is but one of the several—where, in the first days of the fever, positive diazo or Russo tests often would practically "cinch" the diagnosis, although the Widal reaction was delayed. Many of my readers, I am certain, have observed such instances.

Before Russo had proposed the methylene-blue reaction, and we were still forced to rely mainly upon the other reactions as our laboratory aids, we used the diazo test with excellent results. For example, the urine of one man, who appeared in the physician's office complaining of a persistent headache, showed a positive Ehrlich's test, and the diagnosis of typhoid fever was made. Exactly five days later, a positive Widal reaction was obtained.

A certain percentage of cases of true enteric fever fail to produce a positive agglutination test. In others, the diazo reaction may persistently be absent. The actual percentage contrast, in either instance, is subject to so many limitations that I should hesitate to state definite figures; but it is probable that the Widal test fails in about ten percent of all cases of typhoid fever. It is likely that the figures for the diazo test are about the same. In some cases of enteric fever, one reaction may be constantly absent, while the other may be observed. Thus the Widal, or specific, test, may be observed in about fifty percent of those cases where the diazo reaction is absent, and *vice versa*. Using the two tests together and repeating them at intervals during the fever, it will be seen that few cases should escape undiagnosticated.

It is being claimed that the Russo reaction is invariably present in true

typhoid fever. I cannot gainsay this—such has appeared to be the fact in my experience. But when using the three in conjunction, very few cases of typhoid fever would slip by us undiscovered.

Upon this argument, we have made it a rule in our laboratory that, when all three tests are persistently absent, the case is probably not one of typhoid fever. In my paper on "Secrets Hidden Within the Walls of the Blood-vessels" (this journal—p. 384), I cited such an instance. The diagnosis of typhoid fever appeared to be assured, but, upon the basis of negative laboratory tests, we dismissed this possibility. The case, as I recited, turned out to be cancer of the pancreas, with secondaries throughout the abdomen.

Another case will illustrate this rule. Here the diagnosis of typhoid fever had been made and a recommendation ventured that the well water be examined for evidences of sewage contamination. But, during the fastigium, the physician was surprised to observe repeated chills. The typhoid tests were negative. A microscopic examination of the urine showed the presence of thousands of degenerating leukocytes. This pus came from the kidney pelvis. Thus I could cite several other examples where this rule has not failed.

Many physicians are using the Russo test; and, for this reason, I think it wise to present a few words of warning. The man who substitutes this new test for the older ones—or, indeed, for all other diagnostic methods, as the tendency appears—will soon come to grief. Undoubtedly, it will prove a valuable diagnostic acquisition; but, rather than replace the others, it should be used in connection with them.

Doctor, do not throw away your diazo reagents, in the conviction that the Russo test will prove specific. The positive methylene-blue test, like Ehrlich's reaction, has been observed in other fevers and is subject to other serious limitations.

The diagnosis of typhoid fever has become more accurate, but no less tedious—in that one more precedure has been added. The man with the brain is still needed; and it is the sloth who trusts his patient's health and life to a single test-tube reaction that brings the most discredit upon the medical laboratory. I would that I might emphasize this point in large black capitals; for I see it in practice every day.

There is another caution, namely, the pseudo Russo-reaction confuses some men. Bile, if present, gives a typical positive test, and, in case of question, its presence or absence must be determined by other tests. The concentrated urine of high fevers is very highly colored—often a deep copper-tint. So that, when the methylene-blue solution is added, a greenish reaction is noted. (It is a well-known fact among painters that a mixture of yellow and blue pigments appears green.) The positive Russo reaction, however, is shown by a dark-emerald or mint-green, which surely cannot be the result of a simple concentration of the urine, although one observer appears to have reached such a conclusion.

I count as of especial importance the formation of a green precipitate in a "standing" diazo test. This does not always take place, but when it is observed, it points almost conclusively to typhoid fever. Such a precipitate usually forms several hours after the mixing of the reagents and usually after the pink ring and foam have disappeared. In one case, it formed at once, the primary pink color fading rapidly. As a rule, I do not believe that practitioners are confounded by the pseudo diazo-reaction, although laboratory texts take up quite a little space in differentiation.

A boy of ten years complained of considerable pain over one of his vertebræ. One of the bony neuropophyses appeared to be involved, and the surgeon removed considerable necrotic tissue from it. The boy was in good health; but the sinus continued to discharge a creamy pus. We carried out rather exhaustive bacteriologic examinations for the pneumococcus, streptococcus, staphylococcus, and colon bacillus. Finally it was ascertained that the patient had been affected with typhoid fever several years before. A Widal test was positive and pronounced. The treatment, in this case, so I am informed, has been by injections of typhobacterin, and with excellent results.

Although a later reaction than the chemical tests and, consequently, of less value in an early diagnosis, it must be recalled that the Widal test is not only specific of typhoid but is present in almost all cases of this infection at some point in its course. At most, only ten percent of these cases show a persistently negative Widal reaction, so that the physician hardly is justified in jumping at the conclusion that most of his cases fall into this class of exceptions.

"Negative Widal," reads the report.

"Typhoid, anyhow," retorts the physician.

Sometimes he may be correct. But there are some cases where he was not—I have tabulated them from my record: myelogenous leukemia, 1 case; pyelitis, 1 case; appendicitis, 1 case; abscess of the gallbladder, 2 cases; arteriosclerosis, 1 case; abdominal carcinomatosis, 1 case.

On the other hand, the typhoid test has been neglected where there appears to have been sufficient excuse for the physician. In one case, typical symptoms of appendicitis were present—a study of the white blood-cells might have given the clue. Operation showed that, while the appendix should be removed, the disease-processes were by no means localized in that region. Nor did the patient show any indications of returning health after the operation. A Widal test was finally suggested and proved positive. The fever ran a typical course, the wound healing nicely in the meanwhile.

I must mention a rather curious incident in connection with the typhoid tests. Two years ago, I was surprised to meet an endemic of true typhoid fever which invariably failed to produce in the urine of the patient the diazo bodies. This was rather remarkable; and I decided that a peculiar strain of the bacillus must be the criminal in this series of cases. I was somewhat chagrined, however, to learn, one day, that the bottle labeled "Sulphanilic Acid Solution" contained a weak solution of sulphuric acid in distilled water. The pharmacist who had supplied the reagent acknowledged the error, but failed to understand why sulphuric acid would not answer just as well.

The Technic of Intravenous Medication

A Modification of the Watson Method

By B. T. TRUEBLOOD, M. D., Seattle, Washington

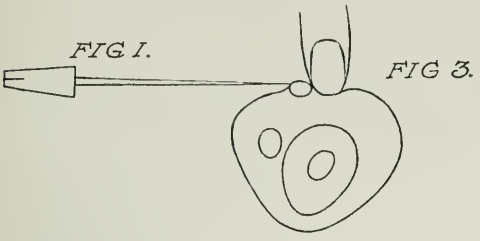
DR. WATSON'S method of entering the vein for intravenous medication, as described in *The Journal of the American Medical Association* of July 25, 1911, is a great improvement over any method I have before seen. I found, however, a want of delicacy in carrying it out, due, first to the necessity of using forceps to hold the transfixing needle which anchors the outer quadrant of the vein to the skin, and, secondly, to the shape of the needle used—the common sewing needle.

I have obviated this by eliminating the forceps and by using a needle of a new pattern. The common sewing needle has a "belly" on it, by virtue of which considerable force is required to push it through the skin and the vein, an objection when a certain amount of delicacy is necessary to pick up just the right proportion of the vein, especially if the latter is small.

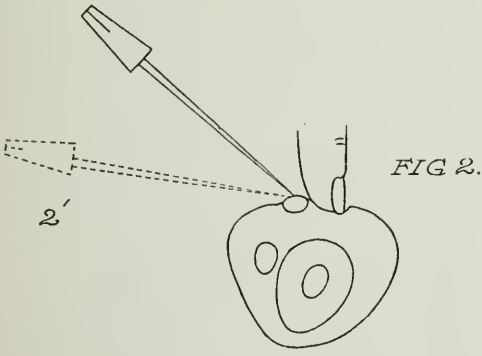
Taking a "Sharps" sewing needle above the medium size, I had the "belly" ground off so as to give it the shape as shown in Figure 1. I also had a head fixed on the needle, which enables one to hold it in the fingers while introducing it, thus dispensing with the forceps.

This anchoring needle, held between the thumb and finger, is bored through the skin and vein by a to-and-fro rolling motion, an operation so painless as scarcely to be noticed by the most timid patient.

The technic will be easily understood by reference to the illustrations. Figure 2 shows a cross-section of the forearm just below the elbow. The arm is corded above



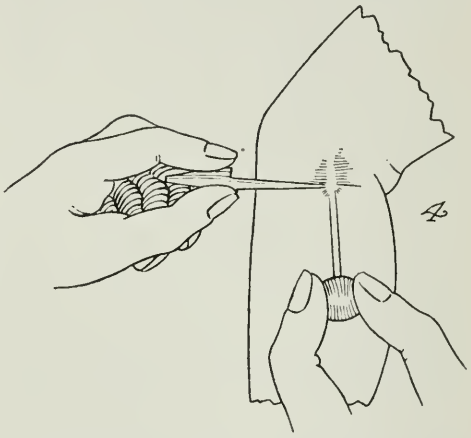
the elbow, and the vein is represented as *raised*. With the index-finger of the left hand steadying the vein and holding it snugly against the skin, the needle, held as above described, is bored through the skin directly into the lumen of the vein. When the point has entered the vein, the needle is lowered (Figure 2, 2′) and pushed on through the vein and skin on the opposite side until it impinges on the finger holding the blood-vessel, when a slight displacement of the finger allows it to pass in front of the nail about one-eighth of an inch (Figure 3), thereby anchoring the vein.



Next take this anchoring needle in the left hand, and then, with the right, introduce the point of the hypodermic syringe just below and in contact with it (Figure 4). As the latter is being pushed in, steady the vein with the anchoring needle, and gently lift it upward and pull it slightly forward if that is necessary to straighten it. You feel the point of the syringe enter the lumen of the vein, and at once the blood flows out through it. It is next coupled with the barrel of the syringe or other container.

A right-handed man should introduce the anchoring needle on the right side of the vein from the patient's standpoint; this will bring patient and the operator in the best positions for completing the work.

In coupling the syringe to the needle, the fluid in it should be flush with the



coupling point, or, better, it should be flowing a little, for then, as the blood is coming out of the needle, there is no possibility of air getting into the vein. As soon as the coupling is effected, remove the cord and allow the liquid to flow into the vein. I use a small hypodermic needle, in size from No. 22 to No. 27, and have no difficulty in giving the required dose.

I have given intravenous treatments by this method with the greatest satisfaction to myself as well as to my patients. I can see no possible excuse for cutting down on the vein where this method is employed.

Pernicious Vomiting of Pregnancy, and Its Treatment with Alkalis*

By A. V. LYON, A. M., M. D., Brockton, Massachusetts
Visiting Physician, Brockton Hospital

SOME years ago I read an article on the subject named in the title. It was an address delivered before the New York Homeopathic Society by Dr. S. H. Blodgett, specialist in genitourinary diseases at the Boston Homeopathic Hospital, and to this article I am indebted for the basis of this paper, which is to record the results, in several cases in my own practice, of the treatment he suggested. It has proven so helpful to me, and in several instances has appeared to be such a new idea to physicians whom I have met in consultation, that it has seemed wise to recall briefly the facts stated in the original paper.

Dr. Blodgett's Observations

Quite by chance, Dr. Blodgett, in examining the patient's urine in a case of persistent vomiting where a kidney lesion was suspected, found reactions showing acetone and diacetic acid, but on testing further could find not a trace of sugar. The physician who had consulted him in regard to the case, being at his wits' end to know how to stop the vomiting which was so persistent, accepted the suggestion to use sodium bicarbonate in 5-grain doses three times a day, and a few days after beginning this treatment reported that the patient was practically well. Soon another specimen from a similar case showed the same reactions in connection with the absence of sugar, and vomiting ceased promptly after the administration of sodium bicarbonate.

These reactions occurring without the simultaneous presence of sugar, was quite surprising, but soon many such specimens were found, from patients similarly affected, of persistent vomiting having no assignable cause.

In the treatment of 250 such cases with this alkaline treatment, prompt recovery followed in all but two. Of these, 90 percent occurred in pregnant women, 3 percent followed operation, and 2 percent were unclassified. The postoperative cases, so recorded, were those where vomiting began between the third and tenth days after operation, and where everything ingested was vomited, and in which there also were found in the urine the acetone and diacetic acid, but no sugar.

Acetone and Diacetic Acid, but No Sugar in the Urine

Now, we know that acetone will appear in the urine from a variety of causes, but up to quite recently the occurrence of acetone and diacetic acid without any sugar was not recognized.

In the examination of about 4000 specimens of urine for acetone and diacetic acid, they were never found to be present in appreciable amounts (unless sugar was present) without being accompanied by nausea and vomiting or else convulsions. Sometimes these reactions are not obtained until twenty-four to forty-eight hours after vomiting has begun, but experiments have demonstrated that they are present in the blood before showing in the urine. These also often are manifest for several days after the vomiting has ceased.

Dr. Blodgett concluded that the presence in the system of acetone and of diacetic acid, as indicated in the urine, is not the cause of pernicious vomiting that can be relieved by the alkaline treatment; neither is the claim made that all cases of pernicious vomiting are due to this form of autointoxication. Nevertheless, this condition does cover many cases, and the easy demonstration of acetone and diacetic acid is a valuable aid and an indication of the proper treatment.

This condition is not strictly an acid intoxication, but evidently is due to some disturbance of the metabolic functions.

*Read before the Brockton (Massachusetts) Medical Society, Jan. 11, 1913.

Dr. Blodgett claimed that this upset is due to some acute condition in the pancreas, and his theory is based on this symptom: if in one of these cases you will use slow, steady pressure with one finger over the head of the pancreas, when the finger gets deep in, one will find a sore spot about the size of a silver dollar—which is not the soreness of the abdominal muscles, due to vomiting.

Since reading this article of Blodgett's, it has been my privilege to encounter 34 cases similar in type to those just described. All but three have occurred in pregnancy; those three being without recognizable cause permitting of classification. All showed the tender spot over the head of the pancreas, and all responded promptly to the alkaline treatment.

As to the diet in these cases, it has apparently very little to do with the results. While, naturally, one would expect the best results from carbohydrates, patients do just as well on nitrogenous food. The only restriction should be the omission of strong acids (vinegar, pickles) for about a week after the vomiting ceases. The best results, otherwise, seem to be procured in letting the patient have what she desires. When rectal feeding is necessary, be sure to stop it as soon as this is allowable. Give the food in small amounts, comparatively frequently, beginning with a few spoonfuls of milk and a light cracker, or dry toast, or a few teaspoonfuls of thin soup and toast every hour.

Sodium Bicarbonate an Efficient Remedy

As to medicine, give sodium bicarbonate, from 5 to 50 grains a day. This may seem impossible when the patient is vomiting every morsel taken into the mouth, and in some cases vomiting when nothing is taken. In very persistent cases, 20 grains of sodium bicarbonate may be dissolved in a glass of water and the patient given a sip occasionally. Part of this will be vomited, some of it, nevertheless, will be retained. Within twenty-four hours the vomiting is lessened, more of the medicine is retained, and the patient is now convalescent. When dissolved in milk or coffee, the soda does not act as well; given by rectum, it does not act at all. It may be given intravenously, however. As soon as vomiting ceases, the soda should be materially reduced, but be continued in small amounts for a week longer.

The whole trouble in these cases is to get the sodium bicarbonate into the system; but when this is accomplished, the vomiting stops and the patient begins to demand an increase of food. Whether any other alkali will give similar results, I do not know. The only other one I have used is lime water with the milk; but this by itself alone is inefficient, and, personally, I see no reason for experiment when the good results from the soda have been so gratifying.

Of course, the bowels should be well cleared, and for this my preference is colonic flushing kept up until the water returns clear. In one case seen in consultation, the improvement from the soda treatment was so sudden that the attending physician could not believe it due to that agent. To convince him, the soda was withdrawn, without change in the diet, whereupon the nausea and vomiting set in again in about twenty-four hours, only to stop promptly on resuming the soda treatment.

The Influence of Pregnancy

The hardest cases to cure seem to be those where persistent vomiting begins at about the second month of pregnancy, while those beginning at the sixth to eighth month are checked very quickly. In a few instances, the subjects have had a relapse after varying intervals, but if treatment is begun again promptly, with perhaps a 5-grain tablet, dissolved in a glass of water, three times a day, it quickly stops.

Dr. Blodgett, by the way, in quite a few cases of convulsions, found that large amounts of acetone and diacetic acid were present in the urine, and such patients were promptly relieved by the alkaline treatment. Of course, these instances are rare, but, as they do occur, it is well to keep the fact in mind.

In the early days of the discussion of this subject, some physicians thought that

the vomiting in these cases of pregnant women might be caused by some condition indicated by indoxyl in the urine; but a long series of experiments seems to have shown that, while indoxyl is likely to be increased in vomiting from any cause, there is no relation between the amount of that body and the severity of the vomiting.

In some cases of persistent vomiting without recognizable cause, and where no acetone or diacetic acid were present in the urine, I have found very marked improvement resulting from veronal; still, what its mode of action is I do not know. In the first case in which I used it (one of pregnancy) I took it up in desperation after trying all the recognized forms of treatment.

I was in despair and had almost decided to empty the uterus, when a reprint came to me mentioning the use of veronal in such conditions. I promptly put the suggestion to a trial and found speedy and permanent improvement. Since then I have found it of similar value, in several cases—some in pregnancy, some without any appreciable cause. It is to be given in 2-grain doses, dissolved in water, every two or three hours.

Calcium Sulphide as a Surgical Adjunct

With Comments on the Mexican Rebellion

By A. R. HOLLMAN, M. D., San Luis Potosi, Mexico

CALX sulphurata, which I have seen extolled so much of late in THE AMERICAN JOURNAL OF CLINICAL MEDICINE, has not been praised a whit too highly; for, during the last twenty years, this remedy has given me results not hoped for from any other agent at my command. In all classes of diseases of the skin, in all infectious diseases, in the diatheses of the blood, in all affections of the respiratory organs, in disorders of the bladder and the urethra, sulphide of calcium is useful, and the one medicament I should not wish to do without. Furthermore, to the surgeon who must, ofttimes, work under adverse and septic conditions, it is a positive boon: no matter how filthy the surroundings, irrespective of how much danger of blood poisoning, there is no fear of septicemia when I know my patient to be saturated with this beneficent compound of sulphur—provided it is reliable and full-strength.

Calcium Sulphide as an Aid in Surgery Amidst Filth

A few months ago I was called to see a patient who had received a bullet-wound. I did not get there until forty-eight hours after the wound had been inflicted; then, it being evening and with only a tallow-dip to give light, I necessarily was forced to postpone surgical work till the next day early.

The wound was in the hand, which was swollen to about three times its natural size. So I applied, temporarily, compresses moistened with an antiseptic solution. For the purpose of cleaning him out, I gave him calomel and podophyllin, 1 centigram of each, to be taken every fifteen or twenty minutes, until 6 doses had been taken; this to be followed by a full dose of magnesium sulphate. In addition, I put him on calcium sulphide, 3 centigrams to be taken every hour until next morning about 10 o'clock, when I should return for further treatment.

Calling as promised, I now took in in their fulness the unspeakably squalid surroundings. The interior of the mud hut was about as filthy as ever I have seen—and I have seen some filth in my time, in this land of the Aztecs. The original color of the mosquito-screen of the bed must have been white, as it was made out of heavy white muslin, but at the date in question, it had the color of dirty ashes. The bed-sheets, of the same material as the mosquito-bar, also had never been

washed. Near the pillow I found several maggots crawling about. I experienced a strong revulsion in my stomach; still, the claims of my patient upon my attention soon took my eyes off the dirty bed and the nasty maggots.

The man informed me that during the night the pain in the hand had disappeared and he had slept comfortably. The hand, as I viewed it uncovered, seemed never to have been washed, and he admitted that certainly he had not washed it after receiving the wound. I found the bullet—a 44-caliber Winchester—imbedded between the carpal bones. I took it out, washed the wound thoroughly with a hot solution of a mild antiseptic, dressed the hand, and then gave him two bottles of the same solution, some antiseptic gauze, and granules of calcium sulphide, 1 centigram each. Of the latter, he was to take one every two hours. That was all.

When I called upon him two weeks later, the fellow was working at his usual occupation—and mind, I did not change his surroundings in the least, even allowed him to keep his maggots in bed with him. (There's no use to give orders when you know they will not be carried out.)

Good Work of Hyoscine-Morphine

Two weeks after this occurrence, I was called by the city to see a wounded man, and was informed, before I saw him, that he would surely die. He was a man about fifty years of age, and, for lack of something better, he had been put in a school-house. Here he was lying on the bare ground, there being no floor. His clothes were filthy and had not been changed for a month. The bullet, also a 44-caliber, had penetrated below the right scapula and, after passing through the right lung, lodged under the sternum. He had been shot four days before I saw him.

Calomel, podophyllin, and magnesium sulphate thoroughly cleaned out the man's bowels, while calcium sulphide was sent on its germ-destroying mission, as usual with me; the wounds were kept clean with an antiseptic. Then I discovered that I was short of an anesthetic, the only thing left being one lone tablet of hyoscine-morphine-cactin. Mrs. Hollman was my only attendant.

Naturally, anesthesia was not complete, with only one tablet of H-M-C to give, and I do not even know whether this was of full strength; at any rate, the patient was wide-awake and in his full power of reasoning. One of his companions threw a handkerchief over his face, however. As he had grunted once or twice during the operation, I was quite surprised when, upon leaving, he said, "Well, doctor, are you not going to take out that bullet?" "And did you then not feel any pain?" I asked in return.

When he answered in the negative, I said, "Then, why did you grunt?" "Oh, well," he answered, "when I 'heard' you cut, I thought it was my duty to groan." There is one for H-M-C!

I left this man on calcium sulphide also, but, owing to the damp ground floor, a complication in the shape of pneumonia set in. This was met with calx iodata and other indicated remedies, and the fellow left for his native state four weeks after the operation.

These cases are given merely to show the power of calcium sulphide over septicemia, and I believe that many times when puerperal fever seemed imminent this drug averted it and thus saved a life.

There is only one danger in using calcium sulphide, and that is, that the surgeon, relying too much on it, may become slovenly and careless.

A Word About the Reported Outrages Against Foreigners

Now, while discussing wounds and men who receive them, I wonder whether it would be amiss to talk of revolutions and the people that make them.

I see a great deal in the papers about outrages by Mexicans upon the American citizens. I don't believe these stories. Or if there are such occurrences, there is some cause for them. If foreigners will mind their own business, as a rule they are respected. So far there is only one case on record to the contrary. I refer to the outrages committed on German citizens at Covadonga. Then there is the

killing, at Torreon, of some Chinese people, who are hated by the lower classes for their superiority as laborers. But both of the instances happened during Madero's Revolution; and, of course, what has happened once, may happen again. But so far these acts have not been repeated. [This communication was dated May 23, 1912.—Ed.]

When I first came to this country, Porfirio Diaz was in his second term. As, after his first term, Manuel Gonzalez followed him as president, Diaz had not had sufficient time to make angels out of demons. At that time I was young and sometimes used arms to defend myself against bandits, and, also, once or twice against abusive local authorities. But every time I have had a clash with the petty authorities of a town, complete justice was done by the powers higher up, and that without any representation, but my own, to defend my rights. But, as a rule, Mexican authorities were extremely courteous.

I remember one little town, in the state of Sonora, where I was awakened one night from sweet slumbers by the strains of Yankee Doodle and the Star Spangled Banner. Then voices called me to get up, and, when I opened the door, there was the presidente municipal (mayor), and with him the ayuntamiento (council) and the band. Upon asking the reason for the disturbance, the president looked me over in surprise and asked: "Why, do you not know that today is Washington's birthday? We wish to honor you by honoring the great American." There was no use telling him that I was not an American, so I let it stand at that.

Americans Are Largely at Fault

To this town came, a few days later, a man such as is looked upon here, in Mexico, as a typical American citizen. I being the only foreigner in town, the man stopped with me. A few days after his arrival, he got gloriously drunk and told everybody that, being a brave American, he was able to wipe, single-handed, the last Greaser from the face of the earth. The mayor, in deference to me, tried to get him home peacefully, when, forthwith, he knocked down four policemen. He was a scion of a strong race, splendid in his animal strength, and to be admired; but his brutality was entirely uncalled for. When the authorities asked me what to do with the fellow, I told them to punish him just like any other offender would be punished under the law; but there was the menace of a complaint to the American consul, and he went free.

Many times have I wondered what Americans would do to a "Greaser" should he behave, in the socalled "land of the free," as I have seen Americans misbehave themselves in the sister-republic of Mexico.

All Americans are not like the one described, of course, but there are lots of them; and they are the people that cause all the trouble. To that class belongs Cutting, he of that disgraceful affair of 1886.

Mexicans have their faults—and tremendously big ones. But so have we; and because our faults are in another class, they are no less faults. The thing is, that, as long as their faults do not interfere too much with us, they are not our business, unless we are missionaries and want to win them for heaven. And when we go to a foreign country to make our living and be one of the people, we must be satisfied with what the country affords.

If there is risk, and we know it, we "have no kick coming" as long as the law protects us on an equal footing with the natives. Rightfully, we cannot expect more; still, the Mexicans have given their guests far more than they have given their own people in the way of opportunities, protection, and courtesy. The guests have not been overly grateful, while in most instances they have grumbled and demanded more, when already they were getting far more than they ever did in their own country.

A Fine Example of Native Kindness

Here is one instance of real kindness, and at a time when foreigners are appreciated for their conduct and valued for their deeds. Living in the town of Panquian, in the Huasteca Potosina, I was called to the town of Platon Sanchez, in the Huasteca

Veracruzana. After several visits to the latter place, I concluded that its superior climate would be the thing for my wife, who was rather delicate and overworked.

Traveling here is done on horseback, and freight is carried in on the back of mules, except near rivers that can be utilized. Owing to the revolution, there was much fear of bandits, of which there was a gang marauding the country, headed by "El Conejo" and "El Coco," both my personal enemies. Upon arrival at Tanquian, on my return from Platon Sanchez (where I had been to prepare my new home), the very first man I saw was El Conejo, who proceeded to count my mules and take stock of everything as I passed him. At my house, I was told that El Coco was in town also.

The next morning we started on the road—my wife and I well armed—with two packers, who had charge of the pack-train. For the first twelve miles we kept together, then I sent the pack-train by unused trails, while I and my wife proceeded to the town of Tempoal, to stop over night. As my horse went lame, I sent a telegram, the next morning, to Platon Sanchez, for another, and this met us half-way.

About five miles from our destination, we espied a cavalcade of about thirty horsemen, and we halted at a point of vantage; for I felt sure that they were the expected bandits. However, as they came up, I was pleasantly surprised to recognize in the men friends who had come out to meet us. Upon our arrival at the town, the band received us at our home with the bridal march, while in the dining room a fat turkey, stuffed with many good things, was waiting to appease our appetites.

It seemed to be a general holiday, for the whole town had united to honor us and welcome my wife, whom they had not met before. The people seemed to like us and honored us, because to us they are *people*, and *not* mere "Greasers." Many a time, during my absence, when there is a hurry-call for the doctor, my wife gets up out of a warm bed and attends to the case; and many a time the little woman has been able to ameliorate some acute suffering or even to close the eyes of some poor woman in her last, long sleep, and to console the orphans; all alone, without any help, until by and by neighbors would come around to relieve her.

When, one time, in compliance with my duty toward the health office at San Luis Potosi, I had to go away for a while, the people came at 2 o'clock in the night to accompany us as far as the river, by which we were to make the trip in a canoe in order to keep out of the way of possible bands of revolutionists. And every one brought some token of regard, until the boat was almost filled with dainties; so much, in fact, that during the eight days on the river we lived exclusively on those delicacies and our boatmen had the best time of their lives. And, in parentheses, the trip was most pleasurable, for the country through which we floated, like all tropical lands when well watered, was most beautiful.

Now, although the bands of revolutionists under Ponciano Navarro (this leader was killed, recently) saw us pass, from the banks of the river and from house-tops, they never molested us by word or deed. More, at the ranch of Tamamas, they took away some horses from the Americans who are boring there for oil, but when they discovered that they belonged to the foreigners, they returned them. At Ganahl, another band also took some horses; but these were returned, in the same way, and to Mr. Ganahl, for the same reason.

Serious Accusations Against Americans

However, many American settlers have left the country, and I am told that, in many instances, they have left the houses open, with furniture and belongings inside, in the hope that they might be robbed. The "*honest*" intention, on their part, is to claim damages from the Mexican Government, if good old Uncle Sam will stoop to act as their attorney and collector. You see, raising international bad feeling and collecting damages is a better business than raising oranges or even onions, for that does not entail work, while kind old Uncle Sam even harvests the crop for you.

I remember when, some twenty years ago, a young fellow with ambition to be-

come consul for the United States urged me to claim $20,000 damages for abuses committed by the jefe politico (chief) of Villa Lerdo, although the government gave me satisfaction and punished the offending parties. There were lots of good friends who were willing to help me by perjury; and, what is more, I honestly think that they were not bad fellows, either, and believed it would be a meritorious action to swear to a mountain when there existed merely a molehill. And they really believe that it is no sin to help things to happen if they do not want to happen of their own accord.

Mexico and the people of Mexico can not be judged by our standards and laws of civilization, any more than our laws of today would have been adaptable to our people of a hundred years ago. Mexico has been hampered entirely too much by outside criticism, and it is my opinion that this country would have done a great deal better if it had been left alone to work out its own salvation.

Mr. Taft is to be admired, not, as some papers say, for his forbearance—for none is needed—but for his sense of justice; who has not been satisfied with cock and bull stories of adventurers, but has investigated until he has proven them false.

There is far more honor to a strong nation in being just than in being rash, even if the rashness be crowned with bloody success. And most Americans, and foreigners in general, who live in Mexico, will regret to see him leave the presidential chair, since, owing to his prudence and sense of justice, foreigners, in spite of themselves, sometimes, have been and are respected by all classes of people in this Republic.

Pruritus Ani

With Special Reference to Treatment

By CHARLES J. DRUECK, M. D., Chicago, Illinois

PRURITUS ANI is the term applied to any itching about the anus, regardless of the cause, and may be a direct symptom of some local rectal disorder or a reflex manifestation of diseased pelvic or abdominal organ, or even a sign of systemic disturbance. The character or degree of itching may vary, and includes all varieties of eczema. Sometimes the cause is discernible, while, again, it is quite obscure, and in some instances there seems to be no apparent cause. The general practitioner often considers it a trifling ailment, although in old and aggravated cases it proves to be intractable and renders the patient's life almost unbearable.

This trouble affects all classes of men and women, for it is found in every occupation and social condition of life and occurs at any age, but is common in males and at about middle age. The itching usually is constant, with exacerbations, especially at night when the patient's body becomes warm in bed; nor is it limited to the anus, but radiates down the limbs, over the buttocks and across the perineum to the urinary organs. Scratching and rubbing gives only temporary relief and leaves after-effects, such as bleeding, cracks, and fissures, which add to the annoyance.

In the majority of cases, pruritus is simply a symptom of some other rectal or pelvic trouble and may, therefore, refer to any neighboring organs, although ordinarily it is due to hyperesthesia of the nerve-filaments.

Etiology

The causes of pruritus ani are many and sometimes most difficult to ascertain, but mostly, when found and removed, the itching will also disappear at once. Sometimes nothing can be discovered to explain the itching.

Various local and constitutional conditions or habits are at times the cause, or,

occasionally, neurotic affections, diabetes, portal congestion, syphilis, rheumatism, albuminuria, or a gouty tendency. Threadworms frequently are the source in children, but rarely in adults; these parasites can easily be found in the folds of the mucous membrane of the rectum, appearing as short fibers and resembling pieces of thread. Chronic prostatitis, proctitis, impacted feces, chronic constipation, and errors of diet occasionally are the source. Hemorrhoids (internal or external), ulcerations, incipient fissure, anal prolapse, polypus, or fistula (any variety) may be an underlying cause.

In women, the affection may occur associated with pruritus vulvæ during menstruation and also early in pregnancy, or in the last few weeks of gestation when the perineum is congested and edematous.

Certain articles of food not infrequently give rise to itching, among them, shellfish, salmon, venison, strawberries, coffee, as well as excessive use of meats and spices. In fact, any rich diet or excess of alcohol or of tobacco may cause it.

When a fistula is present, although the skin opening may be pin-point in size, still the discharge, as it evaporates, leaves a crust that may occasion itching. Pediculi also, by virtue of their presence and excretions, act in the same way. Herpes, erythema, in fleshy people, from chafing and sweating of the buttocks in walking, and eczema, either acute or chronic, are each occasionally the cause of pruritus. In eczema marginata, the spores may be found, under the microscope, in the scales scraped off and moistened in glycerin. Incontinence of urine, whether in children or old people, many times is a cause.

Symptoms

The predominant symptom of pruritus ani is the unbearable itching, which grows worse with warmth and rubbing of the affected parts. Scratching, which is sometimes controlled when the sufferer is awake, is unconsciously performed when he is asleep, and causes bleeding and abrasions of the skin, thereby serving to make the condition more painful the day following.

In recent cases, there often are no visible signs, or there may be a red, glistening, perhaps edematous condition of the parts, with a scanty serous secretion, just enough to keep the skin moist. In old cases, the skin becomes thick, pale, and parchment-like, sometimes even brownish, especially back of the anus and toward the coccyx in the intergluteal space, and the whole surface is eroded and fissured. In protracted cases, the patient's general health and nutrition fail, from prolonged insomnia and nervous wear, and he becomes hypochondriacal.

Diagnosis and Prognosis

Pruritus is easily diagnosed from the anamnesis and then corroborated by the examination, the patient, in the lithotomy or Sims position, affording easy inspection of the entire field. The presence of syphilis, tuberculosis, and especially of rheumatism as an underlying dyscrasia must always be investigated in obscure cases, because that must determine the treatment.

Without careful attention, the outlook is decidedly poor. Periods of improvement are quickly followed by exacerbations worse than those preceding. The itching and pain, together with the loss of sleep, bring the sufferers to the verge of nervous prostration or insanity, if they have not already become opium-wrecks. One patient told me that he had not had one day's peace or a comfortable night's rest in a year. He could do no business, looked and felt as though he was in the last stage of phthisis, and vowed that, unless I could relieve his agony, he would commit suicide.

Under careful, persistent treatment, on the other hand, you may look for a favorable future, provided the cause can be removed. The patient, however, must be told that, unless the cause is purely local, the treatment will require time and perseverance on his part.

The Treatment in General

The treatment of this condition depends, first of all, upon what causes it; for, with that removed, the itching as a rule will disappear. Sometimes the cause is a trivial one. I remember one case of severe

pruritus, unsuccessfully treated by two physicians, that was due simply to a few inverted hairs. These offending hairs were removed, the follicles were destroyed, and the region was dusted with a sedative powder, whereupon the troubles vanished and the subject, who himself is a physician, has never been bothered again.

If there is no apparent local cause, examine the patient's general condition. When anemia or tuberculosis is present, alteratives and tonics, such as arsenic, iron, cod-liver oil, and quinine, are indicated; also nux vomica, for its tonic effect, both systemic and upon the intestinal tract. The tonic value of exercise must be remembered and strongly impressed upon the patient.

The diet is to be looked into and excesses in coffee, alcohol or tobacco cut off, as well as the undue consumption of meats, spices, condiments, and highly seasoned sauces or game. When the gastric digestion is impaired, pepsin, diastase or mineral acids may be needed. In the mateer of the postgastric digestion, the bowel or liver may need attention.

The condition of the passages should be well inquired into. If constipation exists, the bowels should be emptied thoroughly by the help of a saline laxative or of rhubarb, after which they must be moved daily. Aloes is contraindicated as a laxative, because of its irritating effect on the rectum. The administration of intestinal antiseptics, such as salol, sulphocarbolates and ichthyol—5 grains of the latter given night and morning, on an empty stomach—is useful to remove the autointoxication. Intestinal lavage, with large quantities of weak alkaline solutions, is of inestimable value in cleaning out the colon and stimulating intestinal action.

The genitourinary system, both in male and female patients, must be given a thorough examination and the physician satisfied that there is nothing abnormal about these organs that might maintain a reflex excitation. Syphilis occasionally produces a pruritus and eczema about the anus, but a thorough course of mercury and the iodides will remove it. If due to lithemia, the salicylates and alkalis should be freely given.

As the itching is always worse in bed and while the patient is resting, pajama night-suits should be replaced by a cotton gown, which is loose and does not touch the perineum. The pajamas, by fitting closely, increase the production of moisture and increase the chafing. Cotton sheets should be used on the bed and heavy quilts replaced by woollen blankets, which latter permit a more even temperature and thus prevent sweating.

The Local Treatment

Locally, the treatment divides itself into cleanliness, keeping the parts dry, maintaining rest by preventing friction between the sides or by relieving sphincteric spasm. Scrupulous cleanliness as to the local toilet is imperative. The matter of toilet-papers is important, as this experience shows:

Adler calls attention to the fact that harsh papers and ordinary newspaper, because of the printer's ink, often cause pruritus. A patient whom the writer attended presented a very obstinate case of pruritus that persistently recurred, until it was discovered that the sufferer used as toilet-paper the tissue paper which had been wrapped around oranges and lemons. When this practice was stopped and a little local treatment given, the trouble disappeared and has never recurred.

Where contact of the feces produces pruritus, the ordinary use of toilet-paper is not sufficient to remove all of the small particles, and pledgets of cotton moistened in warm water are much more efficient. The addition of one-half teaspoonful of boro-pine powder to a basin of water sometimes is of value.

In conjunction with the local applications to be described later, I have made it almost a routine practice, whether the cause is evident or not, gradually but thoroughly to dilate the sphincter. Hypersensitiveness or hypertrophy of the anal mucous membrane and of the sphincters is always present, and both of these conditions are relieved by this procedure. The dilatation is performed slowly and without using an anesthetic. It has been advised to perform the dilatation under chloroform, but that has the objection that, whenever

you dilate forcibly, there is danger of incontinence resulting, which will be more or less permanent. This mishap is never possible when the dilation is performed by my method.

By frequent moderate stretchings, I overcome the hyperesthesia and abnormal resistance of the anal sphincter and in that way relieve the constipation that occurs from prolonged retention of the feces. This also relieves the tenesmus that is set up and which keeps the skin under tension and helps to make defecation painful.

The local application of lead, zinc, carbolic acid, chloroform, bismuth or mercury affords but varying success, unless the predisposing cause is removed. I have found mutton suet and diachylon ointment preferable to other emollients. Lately I have used hydrastal ointment, either plain or as a base to carry other drugs. It is marketed in collapsible metal tubes, which makes it convenient and sanitary. It may be applied two or three times daily after bathing the parts. Much immediate relief is obtained by brushing the surface with silver nitrate or Churchill's tincture of iodine twice a week. Both applications produce some temporary pain, but the relief afterward fully compensates for the suffering.

Opium is to be used advisedly, because of the possibility of inducing the habit and because the secondary effect of the drug is to produce a general itching.

When the pruritus is due to threadworms, injections of lime water or salt water are sufficient, although sometimes an anthelmintic is necessary. When due to vaginal discharges, douches containing 1 or 2 percent of boro-pine should be used twice daily. In infants, when due to lack of attention during an attack of diarrhea or to fermentation of urine about the parts, I have found hydrastal ointment, plain, all that was necessary.

Eczema as a Causative Factor

Eczema in all its various forms frequently gives rise to pruritus ani. If the skin is dry and scaly, much benefit is derived from tar preparations. Bathe the parts with dilute alcohol and tar water or apply the following salve: Pine-tar, 2 drams; belladonna ointment, 1 dram; hydrastal ointment, 6 drams.

Bathe the parts repeatedly in water as hot as can be borne, together with green soap, to remove the thickened scales and to deplete the local circulation. In exaggerated cases, a solution of caustic potassa, 5 grains to the ounce, may be used. A cloth may be used to sop the hot water on the parts, but do not allow any rubbing. This treatment, used on retiring, often will insure a restful sleep for an otherwise tortured patient.

In the moist variety of eczema and in erythema, soothing applications, such as calomel, bismuth, boric acid, starch or zinc-oxide powders may be dusted on the parts and a piece of lint or muslin inserted between the buttocks.

When the patient is about to indulge in excessive exercise, work or walking, especially an obese subject, whereby he is likely to aggravate the condition, he should apply the above ointment before starting, and after the effort promptly bathe the parts with cold water, being careful to dry the parts thoroughly. Frequent ablutions with cold water give much temporary relief in these cases. For fleshy individuals and others who perspire freely and are liable to chafe, boro-pine solution, 1-2 percent, or 1 : 5000 solution of potassium permanganate makes an admirable lotion to be used daily with the toilet.

In eczema marginata, bathe the parts thoroughly with warm water and soap, dry carefully with a soft cloth and then apply dilute sulphuric acid. It is painful for a short while, but gives immediate relief. Tincture of iodine also may be used. In purely neurasthenic cases, local treatment is of no value and the patient is better off without it. Moral and hygienic instruction are much more needed, and in some instances straight talk, as Morris (*British Medical Journal*) calls it, will do more than all the drugs. In severe cases or when the pruritus is due to disease of the brain, spinal cord or their membranes, it may be necessary to give the patient a narcotic to enable him to sleep. Succus conii, in 1-dram doses three times daily, is

efficacious. Bromides or chloral are preferable to opium, as the latter causes increased itching the next day.

Recently Roentgen-rays have been applied in the treatment of pruritus and eczema about these parts, but the work in many instances has been done by enthusiasts and its value overestimated. Quite often, but not always, the x-ray acts almost magically; but there is always the danger of possible burns, even in the hands of an expert, and this danger is increased if the treatment is continued over a long period of time. It has also been found that azoospermia may be induced unless the raying is done very guardedly, to limit the action of the light to the skin only.

A fifteen-minute treatment every other day for two weeks ought to show results by relieving the itching and by increasing the discoloration of the skin. A tube of low vacuum is held about ten inches from the patient. The surrounding parts are to be protected by lead sheet, and under no consideration must applications or ointments containing metallic salts be applied at any time during this Roentgen-ray treatment.

Nothing is worse than the empirical use of any agent, and it is folly to use the x-ray in every case without first finding the real cause of the itching. Radiography will prove a valuable assistant if its use is limited to cases of unknown origin or those that prove themselves especially obstinate.

Finally, there remains a class of cases in which the pruritus persists in spite of every therapeutic measure and where there is no apparent cause, either local or systemic. In these instances, the actual cautery, applied lightly all over the irritated surface, will at times effect a cure.

Psychotherapy and Its Problems

By W. H. BALDWIN, M. D., Coldwater, Michigan

Some Observations on the Science of Cure

IN presenting this subject for your consideration, it is not my purpose to take issue with any of the many forms of nonprofessional psychic healing. I have it in mind only to call your attention to the importance of the question to us, as medical practicians, and to give some theories as to the psychic production of disease and its cure. In view of the liberal discussion of the subject in medical literature and in medical assemblies, I take it for granted that you believe in a possible psychic cure for organic departures from health and so will not consume any time in attempting to substantiate the text of the subject.

The Spread of Drugless Healing

In order to bring to your notice the importance of the matter to us, as practicians, who have selected the alleviation of human suffering as our life-work, and upon a knowledge of all the phases of which depends our success financially and professionally, I quote from a recent article in *The Medical Council*, by Dr. Eli G. Jones, of Burlington, New Jersey, a writer of considerable prominence and the correctness of whose statements I have no reason to doubt. Doctor Jones says: "The mother church of Christian Science in Boston has 40,000 members. There are 900 churches and societies in America." Then he submits the following statistics:

	Practitioners	Patients
Suggestive therapeutics and magnetic healing	10,000	3,000,000
Christian science	5,000	4,000,000
Mental science	2,000	2,000,000
Osteopathy	5,000	3,000,000
Naturopathy	2,000	3,000,000
Physical culture	2,000	1,000,000
Ophthalmology	1,500	862,500
Chiropractic	500	287,500
Faith-healing	100	200,000
Ford scientists	100	200,000
Emanuel healing	100	100,000

Thus in the United States there are 17,600,000 people who employ some form of drugless healing; and of the 15,963,965 families, 5,000,000, or nearly one-third, practise some form of drugless healing.

I bring these figures by Doctor Jones to your attention, that you may be persuaded of the importance of this subject. These people are not all from the ignorant and superstitious class, but are largely the best families in our community and comprise some of the most intellectual men and women of our country and nation. I do not share Doctor Jones's opinion, however, that the physician within a few years will be deprived of his occupation, but believe this condition will result in calling our attention to the study of the higher forces of nature, tending toward a discovery of their rational and scientific use.

I do not claim originality for the theories expressed in this essay, but present them as ideas gleaned from the reading of the works of men who have made a special study of psychology and some of its phenomena, and which I have found by observation to be, in my belief, based on fact.

In a recent editorial in *The Medical Standard*, of Chicago, the editor says:

"The psychic element is receiving a good deal of attention just now at the hands of medical science, both as an etiological and as a curative factor in disease. We are, in fact, on the recall from the ultramaterialistic position that medicine occupied during the latter half of the 19th century, and there is danger that we may rush to opposite extremes equally foolish, and far less manageable. No one can for a moment suspect us of any disposition to discourage or discount the canvassing of the psychic element in disease and medicine, for all it is worth. We have been persistent, in season and out, in declaring our convictions that of its influence and range the half has not been told." And he further says: "It may be conceded in a general way that psychic forces do influence actual somatic processes, that somewhere along the line they are transmitted into *physical* forces."

This is but one of the many expressions I could cite you to as coming from the ranks of the profession, redeeming us from our gross materialism to an ardent study of the higher forces of our natures.

Up to a very recent period it was our belief that the body composed the man; what the scalpel and the microscope could not uncover did not exist; that for every alteration of the mind there must be a pathological lesion. But we disregarded the fact that in a great proportion of the inmates of the asylums no such lesion was demonstrable. Furthermore, while the works of Huxley, Tyndall, Darwin, Heckel stand as towering monuments to the memory of the men who have done more to redeem the world from ignorance and superstition, and to place it upon the high plane of scientific reasoning, than all others, by their demonstration of the evolution of the body, it remained for Hudson, Myers, James, and others to demonstrate that the evolutionary process does not stop there, but is coincident with the development and evolution of the higher forces of our nature. For, as the nut unfolds itself, from the grosser shuck inward to the germ, which contains its higher forces and of which the outside is but a manifestation, so the body of man is but a manifestation of the higher forces contained by it.

We have been taught that the body is the highest manifestation of the ultimate intention of nature. When this body dies, we weep over it, and tenderly lay it away, strewn over with nature's choicest flowers and accompanied by eulogies of sorrowing friends; and we look upon it as being the man gone. But the fact is, the body is but the grosser part of the many elements which compose the man proper.

If this latter proposition be true, why not, then, that any departure from being at ease (disease) may be caused by an inharmony of the finer, more powerful forces within; and, if so caused, why not be cured by a restoration to a condition of harmony?

It behooves us, then, to banish from our patients' minds thoughts of fear, hatred, jealousy, enmity, of unhappiness in every form—for these unwholesome thoughts create negative and unhealthful vibrations, which manifest disease in the body—and to substitute in their place love, joy, peace, optimism—not, however, denying the existence of matter as an illusion, as some of our religious sects do, but teaching the power and superiority of mind-force over things material.

It is a lamentable fact that psychological aphorisms can not be substantiated by material proof, so, the only means at our resource is to present our ideas by way of statements, reasoning *a priori*.

The Theory of the Dual Mind

Thompson J. Hudson, in his "The Law of Psychic Phenomena," says, "Man is endowed with a dual mental organization, or two minds," which he has designated the "objective" and the "subjective," each endowed with separate and distinct attributes and powers, each capable, under certain conditions, of independent action.

F. W. H. Myers, once secretary of the London Society of Psychical Research, in his work entitled "Human Personality," designates them as two states of consciousness, the "supraliminal" and the "subliminal." Others have designated them as the "conscious" and the "subconscious" minds.

For myself, I prefer the terms used by Hudson, for the reason that the objective mind is understood to take cognizance of the objective world by means of five objective senses, whereas the subjective mind is stated to be that intelligence which manifests itself in all subjective states, such as hypnotism, somnambulism, trance, dreams, and so on, when the objective senses are asleep or are inhibited wholly or partially. Now, as before stated, this statement is not subject to proof; but such seems to be the fact. Let us consider first the phenomena of the subjective mind.

Everybody knows that during sleep intricate problems are sometimes worked out, lost articles are found, warnings are given, and information of distant friends is received. These facts have been ascribed by certain sects as coming from the spirits of departed friends; however, while I do not wish to deny the possibility of spirit communion, all this can be accounted for by a careful study of the subjective forces existing within our own personality.

No subject furnishes so valuable a field for such study as that of hypnotism. The objective mind being in suspension by the will of the operator, the subject is led to perform acts of which he is incapable except in such state, even composing lengthy dissertations upon subjects of which neither he nor the operator has any previous knowledge, and of which performance he has no knowledge or remembrance subsequently in the waking state. Diseased conditions have been corrected and adverse psychical impressions relieved, showing capabilities away beyond the faculties of objective reasoning, yet subjective to it.

The objective mind, or the mind of the brain, on the other hand, is capable of reasoning by all the various methods—the inductive, deductive, analytic, and synthetic. The subjective mind is incapable of inductive reasoning, but, impressed by a thought induced by the brain, will reason it out deductively to minute precision. Thus a subject in a state of hypnosis, when it is suggested to him by the operator that he is a dog, will proceed to carry out that suggestion in detail, so far as lies in his capacity. When it is suggested that he is the great orator Cicero, he will proceed to deliver an oration, many times astonishing his hearers by the logic of his oratory. Have you not, many of you, rendered the most beautiful music or delivered the most profound addresses during sleep, and that you would give much to recall during your waking hours?

But where does the science of cure come in?

Objective and Subjective Mind Defined

The objective mind, as already stated, is the brain-mind, which takes cognizance of all those impressions received through our five senses, which is capable of inductive reasoning, and is that part of us which distinguishes us from the lower animals.

The subjective mind is situated in and gives intelligence to every cell in the body. While it possesses a complete and perfect intelligence for the discharge of its own duties, it is subject to impressions and suggestions from the higher centers, the brain; whence it is that its function may be perverted—and cell perversion is a perversion of the subjective mind's function and may result in cell destruction, that is, disease.

Physiologists have long accepted the fact that cell activity is presided over by a distinct intelligence, always active when

normal, always awake. The distinguished Chicago anatomist, Dr. Byron Robinson, in his writings, alludes to the solar plexus as "the abdominal brain," that controls glandular function through the sympathetic system; and I wish to emphasize the statement that cell function means cell intelligence—and that this is the subjective mind.

Does not the liver secrete bile when you are asleep? Do not the salivary glands secrete saliva, and make no mistake?

How Suggestion Operates

The subjective mind is subject to suggestion. It is the seat of the emotions and passions. It is the storehouse of memory. It works according to fixed laws. It never sleeps. It is through this faculty that habits are formed and skilled artists are educated. The craving of the inebriate is due to the fact that this cell-intelligence has received the suggestion that it likes and cannot do without its customary stimulant. You who have seen the agony of the opium-fiend deprived of his drug know that there is not a cell in the body but cries out for the powerful narcotic they have learned to appropriate, the power of the narcotism constituting the strongest of suggestions; and the more profound the impression on the organism, the stronger is the suggestion, and the harder to discard, or re-educate.

We all know the potency of suggestion in causing disease, and many are recognizing its potency in curing it; nor is suggestion from without the only means; for, being subject to higher or objective reasoning, autosuggestion becomes a factor in producing and curing many conditions.

A patient's mind constantly dwelling on a certain organ, with the belief or fear that it is diseased, is constantly painting a mental picture of such condition; and this sinks into the subjective mind which functions in the organ, first causing a perversion of function, and this finally resulting in organic disease.

In like manner, when we understand the philosophy of subjective impression, we can hold in our mind a picture of ourselves in health and cheerfulness, this tending toward a restoration of function, as life forces their work along positive, or reconstructive, lines, instead of in negative, or destructive, proportionate to the power of concentration.

While I do not endorse the teaching of Christian Science, that restoration comes from the compassionate condescension of the Savior, which, if it did, would place Him in the light of being somewhat moodish in the bestowal of His favors, I heartily commend their doctrine of optimism and the turning of the attention away from that which favors adverse, or negative, suggestion.

We are aware of the remarkable cures that have occurred in all ages, by many different sects and religions and stages of civilization, and of the most absurd practices, from faith in God to walking barefoot in the wet grass at five o'clock in the morning.

This alone removes the subject of psychotherapeutics from the realm of creed or religious belief, and assures us that we have within ourselves silent but most potent forces which wield for us for weal or woe, according to the construction we put upon them, not sentimental but scientific, and to which I have no objection, to applying the term God.

May Others Be Stimulated to Investigate

I am aware that it is hard to present this subject clearly in the space allotted to me, but, if I have succeeded in awakening an interest in the study of this important matter, that will prompt some to investigate the writings of more forceful and capable pens than mine, I shall be satisfied, and for this purpose I would recommend to those who may not be familiar with the literature on the subject the following works: "The Law of Psychic Phenomena," by Thompson J. Hudson; "Human Personality," by F. W. H. Meyers; "The New Psychology," by Wm. James, professor of psychology at Harvard University. Not as final conclusions or even as authority, but as a beginning in the serious study of psychotherapeutics.

Lest I be misunderstood, I wish to add in conclusion that I believe in the efficiency of drugs in the alleviation of disease. I know that a drop of atropine solution in-

stilled into the eye will dilate the pupil, whether or not its character is known to the administrator or the recipient. I know a compound cathartic pill will relieve an overburdened bowel and the patient made to feel better by its administration. I know that surgery will relieve diseased structures that are past the help of medicinal cure. But, also, I am aware of the most potent and powerful forces within us, and it remains for us, as physicians, to bring to bear upon them the light of scientific research, that we may, by our knowledge of its source and working, redeem it from the hands of superstition and arrogance, placing it among the armamentarium of the legalized physician, where its future possibilities are beyond conception.

The Fruit of the Spirit

By E. S. GOODHUE, M. D.

The fruit of the spirit is love, joy, peace, long-suffering, kindness, goodness, faithfulness, meekness, self-control.—The Bible.

1

If you should feel like saying something harsh
About a friend of yours who didn't do
Exactly as you wished him to—
Don't say it, but just think upon
Something he did which you approved of
In the happy days agone!

2

If you should feel like being very rude
To one who seeks an entrance at your door,
Proving himself a bore,
Just swallow your annoyance; say,
You will be glad to help him, if
He comes another day!

3

If some small thing should anger you at one
Who has your gratitude and love as well,
And you should be inclined to tell
Him all you think and feel—
Just let your anger cool a bit,
Pause—and the wound will heal!

4

If a small hand should pull your inkstand down,
Spilling black ruin on the Smyrna rug,
Don't fume—just give the boy a hug,
And teach him then and there that ink
Is not to spill, but used expressly
To make people think!

5

If She should come and ask for kisses, when
You're very, very busy with a plot,
Just give the little pet a lot,
And leave your villain to his fate;
The time to love her 's when she needs it—
Let trifling matters wait!

6

If business should be pressing, and
Time seem too short to speak a tender word
To her who once your dull life stirred—
Stay longer than your wont, today;
Enfold her, and repeat it all,
In the same old loving way!

7

Some time, as surely as the years go by
And dear ones pass on to the other side,
Gladness will in your heart abide;
Knowing that love had ruled your will,
That, always, ere the fatal word, dear
Love said: "Peace, be still!"

THERAPEUTIC NOTES

SERUM TREATMENT OF VOMITING OF PREGNANCY

Fieux and Dantin report, says *The Prescriber*, a case of severe vomiting of pregnancy, in which great relief was obtained by injection of serum from a normal pregnant woman in the early stage. Ten Cc. of the serum was injected at intervals of a few days; gradual amelioration and recovery taking place without recourse to any other treatment.

COLCHICUM FOR VOMITING OF PREGNANCY

The indications for colchicum very often are present in the vomiting of pregnancy. It is indicated when a clear, glary, stringy fluid is being vomited, the nausea being aggravated by the odor of food. So says *The Journal of Therapeutics and Dietetics*, June, 1912. In this connection read Dr. Lyon's article in this issue on the use of alkalis in this condition. The combination of alkali, intestinal antiseptic and eliminant known as sodoxylin seems ideally indicated.

PILOCARPINE FOR DERANGED SUDORIPAROUS GLANDS

Where the skin-glands are inactive, where the perspiration is scanty but yet offensive, the skin lifeless, the odor of the perspiration persistent, give [specific] jaborandi, from 2 to 4 drops [pilocarpine nitrate, gr. 1-64.—Ed.] every two hours for a few days at the outset of the treatment, and during the treatment as seems indicated.—*Ellingwood's Therapeutist.*

ATROPINE IN PHOSPHATURIA

The Prescriber says that, in severe cases of phosphaturia, Umber administered, by the mouth, 10 to 20 drops of a 1-10 percent solution of atropine, or a pill containing 0.0005 Gm. (1-128 grain). This is increased in a few days to 0.001 Gram (1-64 grain), a dose being given after each meal. This dose is maintained for a fortnight, after which it is gradually diminished. Three or four weeks usually is sufficient to effect a cure.

The diet should be calcium-free as far as possible, potatoes, green vegetables, eggs, milk, and so on, should be avoided, but meat and farinaceous diet should be enjoined.

SPINAL INJECTIONS OF MAGNESIUM SULPHATE FOR CHOREA

A review in the *Paris Medical* for May 11 tells of an experience in two children who, in the course of a few days, were entirely cured of very severe chorea by subarachnoidal injections of magnesium sulphate. The favorable action of this salt upon muscular contractions in tetanus and tetanic states had suggested the administration of this remedy, with the expectation of a distinctly favorable effect upon choreic movements.

The technic was: lumbar puncture, abstraction of 10 cubic centimeters of spinal fluid, injection of an equal amount of a 25-percent sterile solution of magnesium sulphate, freshly prepared. The first sequels to the injection were pain in the legs, fever, and nervous depression. These were followed by prompt recovery from the disease.

IODINE AS A LOCAL STERILIZER IN CONFINEMENTS

Dr. McDonald Watkins (*Surgery, Gynecology and Obstetrics*, July) has found the application of freshly prepared tincture of iodine, U. S. P., applied either at once and without previous preparation (in emergency cases) or after a surgical bath with a bichloride wash, to be a very effective mode of sterilizing the field previous to labor, barring the mucous membranes. It is especially useful in labors terminated with forceps and attended by lacerations that usually heal by first intention.

TARAXACUM IN CANCER

Herbert J. Robson reports, in *The British Medical Journal* for May 25, three cases of cancer treated by means of taraxacum. One case was that of cancer of the bladder, in which 1 dram (4 Cc.) of fluid extract of taraxacum was given, three times daily, in 1 ounce (30 Cc.) of water. This dose later

was increased to 2 drams. The patient gained weight and was soon able to go about. Two cases of cancer of the bowel were similarly treated. In these, severe subacute obstructions had occurred. After the treatment the patients had regular and normal stools, with no feeling of obstruction; they had gained weight, and were free from abdominal pain.

COMBATING ITCHING OF SKIN ERUPTIONS

Where with skin eruptions there is much pruritus, the patient should avoid coffee, and avoid salt to a large extent; mild alkaline laxatives, internally, and a solution of the hyposulphite of sodium externally is beneficial.—*Ellingwood's Therapeutist.*

ANTIZYMOTIC VALUE OF THYROIDS AND PARATHYROIDS

Thyroid (including parathyroid) preparations, owing to their power to increase the opsonins and enhance the germicidal and antitoxic power of the blood, are indicated in surgical diseases, septicemia, pyemia, erysipelas, and so on, and in suppurative processes wherever situated, the organs of special sense included.—Sajous.

NAPHTHALIN FOR PINWORMS

Agostino Bosini (*Gazz. degli Osped.*, 1911, p. 517) recommends naphthalin for combating oxyuris vermicularis. The treatment should be commenced with the administration of a purgative, preferably calomel. Then the patient receives, for one week, 1.5 Grams (22 grains) of naphthalin. With sufficient perseverance, permanent results can always be obtained, and the author never observed any disagreeable by-effects from the drug.

ECLAMPSIA

Dr. J. J. Chapman, of Nellie, Oklahoma, writes us that apomorphine is the thing in eclampsia. Also, open the median vein and draw 16 to 24 ounces of blood. Then an H-M-C No. 1. Then a copious high enema. Deliver, of course, as soon as possible.

INDICATIONS FOR POISON IVY

Where the skin is inflamed and red, covered with numerous vesicles; or where the eruptions have a very red base, with itching and tingling; or where the skin is bright-red in spots, the redness closely circumscribed, swollen and edematous, rhus toxicodendron, 10 drops in 4 ounces of water, a teaspoonful every one or two hours [or one granule of the same preparation.—Ed.], is indicated. A typical illustration of this is the local bright-red circumscribed inflammation of acute erysipelas accompanied by fever. Fever is usually present in these acute inflammatory conditions.—*Ellingwood's Therapeutist.*

SODIUM BICARBONATE CAUSING EDEMA OF DIABETICS

Labbé, Bith, and Mlle. Ferkyck (*Paris Medical*, May 18) have shown that edemas are frequent in emaciated diabetic patients, and that most of them are due to the administration of sodium bicarbonate, which, in such cases, often is accompanied by a retention of chlorides. As this retention is not constant, it must be admitted that sodium bicarbonate is capable of producing dropsy—has a "hydropogenic" action.

BROMISM IN A NURSLING

Dr. Comby (*Paris Medical*, May 18, 1912) recently reported to the French Pediatric Society the case of a baby who was being nursed by the mother and in whom a skin eruption was present which was difficult to diagnose. The nature of the eruption suggested bromism, and this idea was confirmed when Dr. Comby found that the mother had been taking about 10 grains of a bromide daily without exhibiting any cutaneous symptoms. An analysis of the milk showed the presence of bromine, and the omission of the drug was followed by the disappearance of the skin eruption in the infant.

THYROID MEDICATION IN RHEUMATOID ARTHRITIS

Two cases of rheumatoid arthritis are described by Horace Wilson (*British Medical Journal*, Dec. 3, 1910), in which the author was struck with the symptoms, some of which strongly suggested a call for thyroid medication. Accordingly, he prescribed thyroid extract thrice daily, with suitable adjuvant treatment, and the results were remarkable, great progress being made under the treatment.

The author thinks the group of cases likely to receive benefit from this line of treatment are those in which changes are chiefly confined to the synovial membranes, without erosion

of cartilage or eburnation of bone. He suggests the advisability of further observation on the action of thyroid gland in rheumatoid arthritis.—*The Prescriber.*

EMETINE IN AMEBIC DYSENTERY AND HEPATITIS

The nausea and vomiting caused by large doses of ipecacuanha constituted a serious drawback to the use of this drug in such large dosage as was necessary in dysentery, but it has been shown that emetine has the power, in high dilutions, of destroying amebæ in broth-cultures.

The author decided to try whether this powerful alkaloid could be safely administered hypodermically in the treatment of amebic disease. Strikingly good results were obtained in the three cases quoted, in each of which emetine hydrochloride was injected hypodermically. In each case the patient was unable to take ipecacuanha. The author considers the use of emetine deserving of further trial.—Leonard Rogers, *Brit. Med. Jour.*, June 22, 1912.

MORPHINE FORTIFED BY GELSEMIUM FOR PAIN

When injecting morphine for the relief of pain, the addition of 5 drops of tincture of gelsemium will double the power of the morphine used; in other words, morphine, 1-8 grain; tincture of gelsemium 5 drops, is equivalent to 1-4 grain of morphine, and its effect is also more lasting. So says a writer in *The Journal of Therapeutics and Dietetics* for June.

A good suggestion. But why not employ the alkaloid, gelseminine? This is not very readily soluble in water, but the hydrobromide is, and this salt may be used hypodermically.

CALCIUM CREOSOTE FOR HAY-FEVER

In an interesting paper on hay-asthma (*Monthly Cyclopedia*, 1912, February), Kolipinski says that an agent which he has found to be prompt and efficient is a solution of calcium-creosote, diluted with 8 to 10 volumes of water, with which the throat and nasal fossæ are sprayed every hour or two for two or three days. The diluted solution should be free from any irritating or painful effect, rather it should distinctly soothe the parts. If the latter is not the case, a further dilution of the fluid may be necessary.

With the persistent use of this simple treatment, the local disease is arrested and made to recede. Contiguous, diffused, and reflex irritation ceases, and the patient's state rapidly returns to normal. The involvement of the eye, pharynx, larynx, and face needs no special treatment. The neuralgia also vanishes spontaneously.

Hay-asthma in every case must be held to demand prompt and close medical attention. While disinfection of the upper respiratory tract with the spray should always be made a part of the treatment in this affection, even though the nasal disease is latent or inactive, yet, asthma from any cause is worthy of serious notice.

In hay-asthma, potassium iodide in small doses—5 grains three times a day—can well be considered a specific, and it is rare indeed when a cure does not result from its use in a week or two. An opiate at bedtime for a few days expedites this by giving sleep and rest to the labored breathing. Arsenic in small doses increases the efficiency of the iodide.

IODINE-GUAIACOL FOR ERYSIPELAS

According to Binet (*Paris Medical*, June 15, 1912) tincture of iodine to which 10 percent of guaiacol has been added, applied daily to the lesions of erysipelas, appears to make the eruption disappear more rapidly than it does otherwise. After the application a dressing should be applied, in order to exclude the air.

OPSONIC INDEX RAISED BY QUININE

It is usually taught that quinine inhibits leukocytosis. Smith, in 1910, taking the opsonic index as a basis, administered quinine, 10 grains, with morphine, 1-7 grain, thus giving the blood a quinine proportion of 1 in 7500. This he found to increase phagocytosis. Smaller doses were less effective, but doses of 30 grains of quinine and upwards lessened phagocytosis, even to the extent of 30 percent.

Waziain found that the continuous administration of quinine to rabbits and cavies, in usual antimalarial doses, distinctly impaired the young animal's growth, as compared with the controls, presumably lowering their power of resisting infection.

ELIMINATION OF CAFFEINE

Salant and Rieger, of the Bureau of Chemistry, Department of Agriculture, in Bulletin

No. 157, present some interesting data on the elimination of caffeine.

The observations of these investigators were made upon rabbits and conies fed on hay, oats, and carrots. It was found that when carrots were fed, the elimination was increased, through the diuretic action of the plant. From 1.72 to 14.02 percent of the caffeine administered was eliminated unaltered by the kidneys—usually 6 to 10 percent. Part of the alkaloid also escaped unaltered by the gastrointestinal canal and in the bile.

Cats and dogs eliminated only about 1 percent. Elimination commenced within fifteen to forty minutes after its administration, the bulk being thrown out within twenty-four hours, and ceased in about forty-eight hours. In the carnivora, a greater proportion is broken up in the body, and caffeine is more toxic to such animals.

Demethylation, or breaking up, of the caffeine, probably is the body's means of defense against this poison, the resistance to caffeine being inversely as to demethylation.

DIAGNOSTIC SYMPTOM OF SALPINGITIS

Dr. Walter Kuehl (*Muench. Med. Woch.*, 1912, p. 424) says that he has observed a constant symptom in salpingitis of sudden onset which has served well for differentiating it from perityphlitis, although often it is absent when the latter affection complicates the salpingitis. Kuehl's symptom is, that the pulse is surprisingly slow and strong, as compared with the high temperature of the patient.

Although this same symptom may also be met with in conditions due to infection of the biliary passages, in the latter the frequent radiation of pain toward the shoulder-blades and other well-defined symptoms serve to establish the diagnosis.

POISONOUS ACTION OF SANTONIN

Say the *Journal de Medicine et de Chirurgie* for July: The mayor of Geneva questions Dr. Baxter's accusation against santonin, as having poisoned a child, in the dose of 0.03. This deplorable case illustrates the danger of administering santonin in castor oil. Intestinal parasiticides in general should be insoluble, else they may be absorbed and exert their influence upon the patient instead of upon the parasites in the bowel. For this reason, the santonate of sodium failed to prove available. One patient succumbed to a dose of 8.0 of extract of fougère, in 30.0 of castor oil, when shortly before he had taken twice the dose without the oil and no inconvenience resulted. The occurrence of xanthopsia is the signal to suspend the administration of santonin.

SIGNIFICANCE OF PAIN IN THE SHOULDER

Pain in the right shoulder, says McGuire (*Buffalo Medical Journal*, June, 1912), is very frequent in diseases of the gall-bladder, liver, and duodenum, because of the connection between the phrenic and the supracapsular nerves. Pain in the left shoulder goes through the sympathetic pneumogastric nerve. This nearly always means an involvement of the pylorus, either with ulcer involving the peritoneum or in the gall-bladder adhering to this region.

SPRAY FOR NASAL CATARRH

The following spray is recommended by W. Stuart-Low (*Practitioner*, April, 1912):

Sodii chloridi ..... gr. 45 (3.0 Gm.)
Sodii salicylatis ..... gr. 45 (3.0 Gm.)
Sodii biboratis ..... gr. 96 (6.0 Gm.)
Potassii chloratis ..... gr. 96 (6.0 Gm.)
Glycerini ..... dr. 4 (4.0 Cc.)
Aquæ, q. s. ad ..... oz.6 (170.0 Cc.)

Label: Two teaspoonfuls to be added to 1 ounce (30 Cc.) of warm water and used to spray or sniff up the nostrils.

THERAPEUTIC AND OTHER PICK-UPS

Exophthalmic Goiter.—If the patients are very restless and excitable, it is of the utmost importance that they should be kept quiet, and in extreme cases hyoscine is certainly the best drug for this purpose.—Hale White, *The Lancet.*

Ptomain Poisoning.—The Lancet, December 3, contains an account of an outbreak of illness in Carlisle traced to a can of American corned beef.

Herschell calls attention to the fact that the increase in duodenal ulcers and appendicitis coincides with the development of the use of cold storage meats by the masses.

Sulphur.—Besides being a mild purgative sulphur is an antiseptic in the intestine from the formation of H_2S when bacterial decomposition takes place in its presence. This explains its efficacy in chronic gout and rheumatism, and some skin diseases. Sulphur has no action on digestive enzymes, but taken too long occasions depression.—Wild, *The Lancet.*

GLEANINGS from FOREIGN FIELDS

TRANSLATED BY E. M. EPSTEIN, M D.

The Bitters in Therapeutics

THE number of medicinal bitters is considerable. Into this category may be ranged some mineral materials, as the salts of potassa, soda, lime, and magnesia; some animal products, as ox-gall; and here, too, belong numerous vegetable substances which have no analogy whatever with the bitters named and which possess an action quite different from them. The latter are the drugs properly called bitters—the febrifuge bitters, the purgative bitters, the stimulant bitters, the tetanizing bitters, the antispasmodic and the contrastimulant bitters. But when we speak of bitters therapeutically, we generally have in view no other substances than vegetable substances which have a bitter taste and are used for tonic medication.

According to some chemists, the bitters have no digestive action whatever. Buchheim and Engel maintain that they even retard, by their presence, the artificial digestion of the albuminoids. But clinicians have many, and cogent, reasons for giving the bitters a very important place in therapeutics.

The fact is certain and can be easily proven by the patients' experience that the bitters impress a great activity on the dynamism of the digestive organs, that they increase the contractility of their muscular fibers and capillaries, augment the secreting activity of the glands; that, also, they provoke the appetite and call for a greater quantity of nutritive food, by accelerating its conversion into nutritive juices and thus introduce into an enfeebled economy a plentiful supply of reconstructive elements. The bitters are, therefore, not only aperients or stomachics, but also tonics and excitants.

Taken five or ten minutes before a repast, bitters produce a slight warmth, and a feeling of tonicity, comfortableness, and an appetite which facilitates the digestion, and accelerates it especially in persons who digest slowly and with difficulty.

Certain authors think that the therapeutic action of the bitters does not reside alone in their faculty of causing the digestive juices to be secreted but is connected with their influence on the taste. Prof. J. P. Pawlow affirms this clearly in the following statement:

"In very close relation with the question of the appetite, it seems to me, comes the question about the therapeutic action of the bitters. After being in great vogue for a long time, these medicaments have almost wholly disappeared from the therapeutic arsenal. Put to the laboratory test, they have not justified their value and their former renown. Introduced directly into the stomach or into the blood, many of them were powerless to cause the digestive juices to be secreted, and so they lost much of their prestige in the estimation of the clinicians, even to such a degree that some have completely suspended the use of bitters.

"It is plain that we must be guided by the simple reasoning that an enfeebled digestion cannot be benefited except by that which in a given case is capable of stimulating the secreting activity. However, doing this, we lose sight of the fact that the conditions of experimental research do not concern themselves, perhaps, with the real conditions of function. The whole question about the therapeutic importance of the bitters appears in another light as soon as we connect it with the knowledge of how they act on the appetite. According to the unanimous opinion of ancient and modern physicians, the bitters excite the appetite, and by this fact the question is exactly solved.

"Thus, then, the bitters are in reality the exciters of secretion, since the appetite, as we have often repeated, is the most potent excitant of the digestive glands. And, hence, it is equally not to be wondered at that men did not observe in the laboratories how things act under the influence of the bitters, for there

they are introduced directly into the stomach or into the blood of a perfectly normal animal.

"Now, the action of the bitters is connected essentially with their influence on the nerves of taste. It is, in fact, not without reason that numerous bodies endowed with very diverse chemical properties were put into one group because they had this single one character in common that they had a bitter taste. A person who suffers from a digestive trouble has at the same time a dulled or an indifferent taste. Foods that please others, or even himself in health, seem to him insipid now. They not only do not provoke a desire to eat but they stir up a sense of disgust, the gustatory sensation being totally absent or acting to the contrary.

"Under such conditions, we must give the gustatory apparatus a proper push, so that a new, lively, and normal gustatory impression shall manifest itself. Experience teaches us that this purpose is obtained most rapidly by strongly diagreeable gustatory impressions which by contrast evoke the manifestation of an agreeable impression, and, anyway, there is no more the former indifference and the appetite henceforth is able to manifest itself in the presence of this or that food-article.

"The explanation, why the bitters start the appetite at the mouth when they are given that way, does not exclude an action of the same order starting at the stomach when introduced there. We repeat that we have some reason for admitting that for exciting the appetite there is need also of a certain excitation of the stomach. It is possible that the bitters act, not only on the gustatory nerves of the mouth, but also on the gastric mucosa, in some particular way and which originates a sensation contributing to the genesis of a passionate desire for food. That under the influence of certain bitters such particular sensations manifest themselves in the stomach is a fact which many chemists are inclined to admit."

Strajesko thinks that the bitters should be given in small quantities and in a form capable of exciting the nerves of taste. The use of small pills is inefficacious.

Bonani also affirms that the bitters should be given: (1) in a form which may excite the nerves of taste, their direct influence on the gastric secretion being, so to say, zero; (2) a little before the repast, since they excite the appetite by contrast; (3) the bitters should be given in all cases of atonic weakness of the digestion (primary or secondary), that is to say, in affections where the appetite has to be stimulated, for Bonani holds with Pawlow that the appetite is the incentive which is capable of setting to work the neuromuscular apparatus of the stomach.

I believe that these authors, especially Bonani, go a little too far in affirming that the little pills produce no effect whatever. That in certain cases, such for instance as when there is a profound disgust against all nutriments, it is necessary first of all to excite the salivary glands, I admit, but in most cases it is not necessary.

In flatulent dyspepsia, it is most useful to act upon the gastric mucosa, and here the bitters render the greatest service. When one masticates badly on account of bad teeth, or when the food stays in the stomach too long, fermentation takes place. The patient feels as though there were a heavy weight at the pit of the stomach, he becomes somnolent, has no energy to do the slightest labor or any exercise. His stomach is inflated so that he has to unbutton his garments, and the intestines become similarly affected by contiguity and are filled with gas.

What is to be done in such a case? We must give the stomach that energy and vitality which it lacks, and for this there is nothing else to do than to administer the bitters, and of these, quassin especially, which acts marvelously. Quassin increases, not only the salivary secretions, the gastric juice, the pancreatic juice, the bile, and the secretion of the intestinal glands, but it augments the tonicity of the muscles of the entire digestive tract, and this normal tonicity causes the constipation and flatulence to disappear.

The bitters, and especially quassin, therefore are indicated whenever, in the absence of any irritating or organic lesions, there is little appetite, slowness of digestion, or when digestive debility is a natural consequence of an arthritic disease or of a painful and slow convalescence.

Quassin having an excessively disagreeable bitterness, it can on that account not be administered in any other form than that of small pills or granules. I prescribe them in doses of three or four, five or ten minutes before the two principal meals of the day. When there is a complete distaste for any nutritive substance, I recommend that one quassin granule be dissolved in the mouth, in order to start the secretion of the salivary glands. But we may always try to restore the appetite by swallowing the granules rapidly.

Quassin granules ought not to be taken for an indefinite time. When the appetite

has returned, the digestion has become easy, and the flatulence has disappeared, the quassin should be stopped; but resumed again when the trouble reappears.—Dr. H. Vigouroux, in *La Dosimetrie* for May, 1912, p. 65.

PÆNOL

The pænol found in the root of pæonia arborea is present, according to Séron, not in a free state, but in the form of a glucoside. This glucoside is split, by a ferment in this root and also in the root of the pæonia officinalis, into pæonol, obtained in the form of pointed crystalline needles, and into sugar. This splitting can be secured also by diluted mineral acids, but not by invertin or emulsin. —*Repert. d. Pharm.*, in *Pharmaz. Zentralhalle*, 1912, p. 704.

ALCOHOLIC DISINFECTION

An alcohol of 70 percent (by weight)greatly surpasses all other degrees of concentration as a microbicide, according to the investigation of Beyer. It acts almost thirty times stronger than a 60-percent, and more than forty times stronger than an 80-percent alcohol (always by weight). Alcohol of below 60 and above 80 percent is nearly worthless for practical purposes. Alcohol should, therefore, be tested before using it (Schwimmer), since but slight changes in its concentration will render it useless for practical disinfection.

Absolute alcohol acts as a preservative of bacteria because of the absence of water. The bactericidal power of alcohol depends upon the presence of the strongest practicable alcoholic concentration on the one hand, and, on the other hand, on the presence of enough water to render it workable. The most favorable mixture of alcohol and water for germicidal purposes is that of 70 percent alcohol by weight. Higher concentrations are effectless on account of the lack of water, so that it dries up the bacteria and preserves them.

Absolute alcohol, the writer says, does not act destructively on dry bacteria. Mixtures of alcohol with chloroform, ether, benzol, acetone, glycerin, carbon bisulphide, and petroleum-ether do not surpass the aqueous mixture in germicidal power. Cologne water acts more effectively as a disinfectant than a corresponding pure alcohol-water mixture, and the bactericidal power of cologne water seems to grow stronger in the course of time.

Most of the ethereal oils do not seem to be available for disinfectant purposes, either pure or dissolved in alcohol.

The effect of carbolic-acid, lysol or cresol soaps does not seem to become augmented essentially by solution in alcohol.

Iodine-alcohol surpasses all other disinfectant agents, killing even anthrax spores in one minute. Weak iodine solutions of 1-4-percent strength show themselves to be perfectly reliable in the destruction of staphylococci. Decolorized (with animal charcoal) tincture of iodine also is strongly bactericidal.

Iothion (a colorless, 80-percent iodine) retains its germicidal effect in watery and albuminous fluids. Its alcoholic solution, however, is less germicidal than a pure solution of iodine. Chlorometacresol is said to increase the bactericidal effect of alcohol considerably.—*Ztsch. f. Hygiene u. Infektions-Krankheiten*, in *Pharmaz. Zentralhalle*, 1912, p. 723.

INTELLECTUAL ABILITY OF THE BEE

On this highly interesting subject the well-known bee investigator, F. Gertung, writes in the April, 1912, issue of "*Unsere Welt*" as follows:

It is logically utterly impossible for us human beings to explain operations which betoken the highest intelligence in their [the bees'] mathematical perfection considered from the human point of view, to explain those activities by, not only without referring to, but even excluding any and every intelligence. Furthermore it is impossible for us to accord to bees this intelligence which we are compelled to presuppose. There is, therefore, left for us but this one simple positive assumption, that in the unconscious processes of nature there is, after all, an embodiment or expression of an eminent cosmic intelligence.

This "power" is mostly called "instinct," and people speak even of single instincts. Instinct is, therefore, fundamentally nothing else than objective, absolute intelligence innate in the orderliness of nature and perfectly operative in it; which intelligence, though it does not become conscious in the bees, yet fully dominates in them all their states, functions, and vital regulations.

Thus does the question of the origin of the bees' cell lead us into the profoundest problems of organic being, to the question about the essence and functions of the animal soul.—*Der Geisteskampf der Gegenwart*, 1912, p. 198.

MISCELLANEOUS ARTICLES

Comments on the July Clinic

Copper in Typhoid and Meningitis

DR. W. C. WOLVERTON reports a case (July CLINICAL MEDICINE, p. 726) of typhoid fever and complications, which was treated in a masterly way. He deserves congratulations on the outcome. But—it is very easy for an outsider (who might not have succeeded so well himself with the actual case) to criticize another man's treatment, and to make *ex cathedra* statements (impossible to prove) as to what should have been done, and what would have been the result. I do not wish to be guilty of anything of the sort, but to offer a modest suggestion, in the hope that it may be tried and found to be an improvement in subsequent treatments.

I have nothing to say against any medicine Dr. Wolverton gave this case, but it looks to me like a typical "copper case," from first to last. I think that if this patient had been saturated with copper sulphocarbolate from the start, in all probabliity none of the complications would have presented. I think also that, if this salt had been added to the treatment at any stage of the disease, it would have been found to be of great benefit.

I cured a bad case of cerebral meningitis with copper sulphate (I had no sulphocarbolate then). This was evidently a very severe infection, and I believe would have resulted fatally without the copper. But there were no complications—even the spinal meningitis did not become involved. The attack lasted less than a week, and convalescence was rapid and complete. The only drugs used in this case were copper sulphate, in dosage kept below the nauseating point, and calomel in doses of 1-200 grain.

The various vaccines and bacterins are all right, but, in my limited experience, the proper chemical bactericides—the sulphides (of calcium and arsenic), copper, mercury, and similar remedies—give quicker and more thorough results. Of course, the bactericide must be selected to fit the infection, with as much care as a bacterin would be. If in doubt, use the sulphides; but copper will be found far more effective in typhoid fever, cholera, bacillary dysentery, and possibly other infections. There is no objection to giving the bacterins simultaneously with the bactericide. Dead bacteria cannot be killed any deader.

Dr. Wolverton does not state how long the calcium sulphide was continued. It seems to me that, if saturation with the sulphide was continued long enough, it ought to have stopped the development of the pyogenic micrococci, even if it failed to control the bacilli.

Hot High Colon Flushes

Dr. Arthur Zimmer's statement (quoted on p. 742, July CLINICAL MEDICINE, from *Wien. Med. Woch.*) that colicky pains never occur if the water is hot enough (say at about 109° F.) needs modification. As it stands, it is true only when the colon is free from flatus. If gas is present, pain will be felt as soon as the water reaches it, no matter what the temperature. If the water is hotter than the colon, the pain will be increased in proportion to the degree of excess heat. For, in addition to the pressure of the water on the gas, we have the expanding influences of heat.

The quickest way to get rid of the gas is to dissolve 5 mg. (gr. 1-12) of physostigmine salicylate on the patient's tongue, and then to massage the gas out. But massage without the physostigmine is preferable if an enema is to follow, as there is less peristalsis to combat.

As a general rule, the temperature most agreeable to the patient and the one which excites the least expulsive reaction is the exact temperature of the colon—about 100° F. At this temperature a large quantity of water can often be introduced without the patient's knowing that the flow has even started. As the temperature varies from this, either above or below, sensations of heat or cold are produced and these in turn stimulate peristalsis, both reflexly and through their effect on the patient's mind.

This influence naturally increases as the temperature of the clyster varies from that of the colon. In general, cold flushes, produce stronger expulsive reactions than hot ones. But patients vary greatly in their reactions to enemata. Some like them hot, and complain of pain if the temperature is below 103° F. But if the temperature of the water is sufficiently increased, or if it is exactly that of the colon, there will be no pain, unless gas is present. Other patients do not bear heat well, and prefer their clysters cold, sometimes even below 90° F.

Hot flushes, such as advised by Dr. Zimmer, are powerfully diaphoretic. This effect varies directly with the degree of heat, the quantity of water introduced, the length of time it is retained and the temperature of the room. The same may be said of the Turkish bath. But to get the same effect from a clyster, far less heat and less time are needed. In other words, the hot flush is several times as effective as the Turkish bath. For a thorough clean-out of the entire colon, together with thorough diaphoresis and moderate diuresis, no one procedure compares with a gallon of water introduced into the colon, at a temperature of 103° F. or over, and retained fifteen minutes. A temperature of 109° F. is rarely bearable without a general anesthetic.

Such a large hot flush will often abort a sthenic fever, if given early enough. It is rather too exhausting for a debilitated patient. On the other hand, it is not an emergency procedure, as the patient usually needs a course of training before it is possible to introduce such a large quantity of water, except under a general anesthetic; and then the relaxation of the sphincter makes it difficult to retain.

A splendid clean-out of the urinary system may be effected by a large hot flush given at bed-time, and followed by a suitable dose of hexamethylenetetramine (formin, urotropin, etc.) or other medicament, dissolved in a pint of water, at blood heat, thrown into the colon or rectum, and retained all night. In the morning there will be no liquid in the rectum, but the bladder will be distended.

In giving hot flushes, the difference in temperature between the anus and skin of the perineal region on the one hand, and the interior of the colon on the other, must not be overlooked. Water which is perfectly comfortable, so long as it is confined within the colon, may make the patient jump with scalding pain, if a little bit escapes around the tube and wets the skin. CHARLES F. MORRISON.

Apopka, Fla.

[I wish Dr. Morrison would tell us what effects he gets from his 1-12-grain doses of physostigmine. They seem large to me, and I have obtained most satisfactory and more pleasant effects from the small, frequently repeated doses of this remedy. The Doctor's suggestions regarding the uses of enemas are exceedingly valuable.

As to copper sulphocarbolate, it is clearly here to stay, and interest in it is growing. We are glad to say that it is now commercially available in 1-64-grain granules, and in 1-grain tablet-triturates suitable for making solutions.—ED.]

A FINE LABORATORY MANUAL

At last we have found a laboratory manual which seems to us exactly suited to the needs of the general practitioner. It is Williams' "Laboratory Methods," the authors being Drs. B. G. R. Williams and E. G. C. Williams. The former has contributed many fine papers to CLINICAL MEDICINE (there is one in this issue) and needs no introduction.

This book is practical; it tells just what you want to know; the details are all in it; illustrations are numerous; and the price ($3.00) is right. Prof. Victor C. Vaughan, of Ann Arbor, wrote the introduction. Later we shall give a full review. Meanwhile we want to urge you to get a copy at once. It is procurable of the publishers, the C. V. Mosby Company, St. Louis, or THE AMERICAN JOURNAL OF CLINICAL MEDICINE will fill your order.

OUR PROPOSED POST-GRADUATE COURSE "INDEFINITELY POSTPONED"

Although we have received much encouragement from the readers of CLINICAL MEDICINE, a considerable number of whom have expressed a desire to attend, after careful consideration of all phases of the proposed plan to conduct a three-weeks' post graduate course at Ravenswood this fall, we have finally decided not to undertake it.

In order to make such a course a success, it would be necessary for all of our "faculty" to devote to it an amount of time and energy, both in preparation and during the course itself, that the ever-increasing demand upon us, to keep up with the growing interest in and consequent expansion of our work does not, in justice, permit.

Possibly in another year we may be able to take the matter up. Meanwhile, we shall try

harder than ever to make CLINICAL MEDICINE a postgraduate course in itself. We shall strive to make it just as practical and as helpful as possible to its readers; and in order that we may largely increase its efficiency, we shall appreciate active cooperation from all of you—suggestions as to what you want presented, with all the helpfulness out of your experience you can possibly take the time to give us.

We get enough (perhaps too many) of the longer papers, but we can always use short, crisp, pointed, practical articles (many of them) dealing with problems of everyday interest to the profession at large.

In writing these, let us have less of theory and more of personal experience. If you feel that you can not write such papers yourself (we know you can!), tell us the subjects that you want discussed and we will try to get others to take them up.

But, surely, every reader of "THE CLINIC" can send us at least from 100 to 300 words of practical "helpful hints" concerning some therapeutic or clinical subject or subjects—and more than once a year, too. And doing this, remember that you are talking to more thousands (actual, hard-working each time practitioners) than ever got together at a national convention, a league ball game or for any other purpose, in any one place—ever.

Frankly, "a postgraduate course" of this kind, conducted through the pages of CLINICAL MEDICINE, with your help, unquestionably will be more generally useful to the profession than the one we had planned to give at Ravenswood. Please help us to make it a success.

W. C. ABBOTT.

MILK AND CATTLE INSPECTION

Will you allow me to intrude again into the domain of human medicine? Of late I have noticed in medical journals and in other publications, both in the United States and Canada, the very elaborate details of the milk-inspection systems adopted by the health officers of various municipalities.

Now, in nearly every city, and in Toronto in particular, the very greatest care is exercised in laying down regulations in respect to the cleanliness in the marketing of the milk, the housing of the cows, sterilizing milk-cans, etc., *but*—and it is a very big "but"—the cow, the fountain-head of the whole concern, may or may not be tuberculous, and, yet, she is usually not considered at all. True, officials make periodical visits to the farms and inspect the premises and the cows, but the man who can definitely diagnose tuberculosis without the tuberculin test is yet to be born.

Now, medical men do not, as a rule, know anything about cattle or their diseases. A veterinarian is supposed to, and generally he does. Would it not be better for the municipal health officer to acknowledge this fact and consult a veterinarian before advising his board on milk-inspection questions? It seems to me to be a work of supererogation to take all these elaborate precautions for the handling of milk which may be, and most probably is, derived from diseased cows.

Would it, then, not be better for the two branches of medicine to combine, using each its special knowledge, than to depend on a system which, in plain words, is nothing more than a farce in many instances and a broken reed to depend upon for the protection of the public health?

C. G. SAUNDERS, V. S., B. V. Sc.
Toronto, Canada.

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[Meat constitutes thirty percent of the food of the American people; milk, butter, cheese and eggs, also of animal origin, a very considerable additional proportion. The responsibility for the wholesomeness of this large percentage of our food is very great, and being appreciated more every year.

That only veterinarians are qualified to pass upon the wholesomeness of foods of animal origin at its source is self-evident, although in the past this fact frequently has been overlooked. To appoint lay inspectors to pass upon the health of animals serving for food production is not a whit more sane than the appointment of laymen to judge as to the health or disease of man. To put a layman in charge of the executive work connected with the inspection of animal food products is exactly on a par with putting a layman at the head of a board of health and permitting him to formulate and execute its rules of action.

With the foregoing no thinking physician will disagree, and it must further be remembered that in so far as animal diseases and the wholesomeness of animal food products are concerned, the physician who has not, in addition to his medical training, had a thorough scientific course in veterinary medicine is a layman and as little qualified to judge as is the butcher.

The responsibility for the wholesomeness of a city's meat and milk supply logically should rest with a veterinarian. The manner of handling these products after they are prepared for

consumption may well be a matter for the regulation of the board of health, but which will do well at least to avail itself of veterinary advice on the subject, but the health of animals utilized for food production as also the manner of preparation of this food should be under the control of those qualified for this work, and this of course means veterinarians.

That our federal meat inspection is the best in the world is admitted by all impartial observers qualified to judge in this matter. The U. S. Department of Agriculture long has recognized the absolute necessity of having veterinarians for this work, and no part of the federal meat inspection, from the executive head to the inspectors in the abattoir, is in charge of any but veterinarians.

Municipal ordinances and regulations for meat and milk inspection not based on accurate knowledge of the subject such as only veterinarians by schooling and training possess, are, as Dr. Saunders says, more or less (and generally more) a farce.—Ed.]

INFANTILE COLIC FROM COLD LEGS

Last summer when practising in North Dakota one of my little patients was a fat little fellow of four months. He was of Scandinavian parents, and, like many of these youngsters, had a good physical start. His only trouble was colic, which came on every day. He was a mother-fed child and I could find nothing wrong with his mother's milk. It was a hot summer, particularly during the day, when his colic would bother him. It was cool at night and he was covered up to keep warm, and then he had no attacks.

As the day grew warm his mother would lay him in his crib to kick up his heels and his bare legs to keep them cool, and soon he would start to yell. I prescribed stockings. His aunt objected and his mother protested, but I got them on him, and by this simple expedient put a quick stop to the colic.

In this case the chilling of the blood at the knees, ankles and feet (and one is as susceptible as the other) had an effect on the nerves of the stomach and intestines. If continued, it would have led to poor digestion and assimilation, faulty metabolism and, lastly, to an underdeveloped child.

Wendell White.

Los Angeles, Calif.

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[Dr. White properly emphasizes the importance of maintaining vascular equilibrium, which is particularly necessary in treating the digestive disturbances of children. This is a matter often overlooked. It doesn't take much to upset the intestinal apparatus of an infant. It is for this reason that in the bowel troubles of childhood a few doses of aconitine, with a few granules of brucine, as needed, often help wonderfully. The abdomen and extremities should *always* be protected against sudden changes of temperature, as a matter of course.

Other measures which give relief are the warm-water enema, rubbing the bowel-wall gently with warm olive oil, to which a little antiseptic oil may be added, and the internal administration of Waugh's anodyne or Candler's calmative, dissolved in warm water.—Ed.]

HEMORRHAGE IN TYPHOID FEVER

In treating hemorrhage in typhoid fever, I lock the bowels with opium and acetate of lead, and give 10 drops of oil of turpentine every two to three hours. Right here I want to say that, if you use turpentine when the tongue is red and dry, you will have no hemorrhage or ulcer. Never let the temperature get above 102.5° F. Use 2 1-2 to 3 grains of phenacetin and 2 of salol to reduce it; stir up the liver; keep up the sulphocarbolates, and its control is easy. This is from an experience of 47 years.

In my early days I used oil of turpentine after the first week, and kept it up until the patient sat up. My brother, long before the War, relied upon small doses of calomel and 10 drops of oil of turpentine every two hours—less frequently as there was improvement. I use it in emulsion with acacia. Give milk, broth, and strained fruit-juice in alternation every three hours.

I cannot recall seeing a patient die from hemorrhage of the bowels, after locking the bowels for three days. Use injections to open them. I have only had two cases of perforation in my experience, and of course both patients died.

I believe in oil of turpentine.

W. S. Cline.

Woodstock, Va.

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[Oil of turpentine surely is one of our most valuable remedies in typhoid fever. For meteorism it is *the* indicated remedy, and its value in hemorrhage is probably largely due to the fact that, by eliminating the gas-factor, while the bowel is put at rest by the opiate, internal irritation is removed and physiologic rest naturally follows. But—and this "but"

is important—I have rarely had any hemorrhage to deal with. If the bowel is thoroughly cleaned out in the preliminary treatment (calomel), and kept clean (laxative saline), and if the sulphocarbolates are used to full effect, there will be mighty little gas to annoy and the temperature will be so low that it won't need worrying about. I don't think much of phenacetin and salol in these cases, preferring the defervescent alkaloids, plus hydrotherapy when hyperthermia is really troublesome—as it rarely is. But Dr. Cline knows the game—I know him of old.—Ed.]

PHENOL POISONING

Not long ago, a man showed me a bottle of urine that was of a bluish-green color, and he asked me what was the cause of that. It was passed by a child of eight. I replied that it must be due to something that the child had taken, but offered to make an examination. The child was not sick, and the parents knew of its taking nothing out of the ordinary.

I found the normal elements of the urine in their usual proportions. Upon testing for different drugs, however, I secured a fine reaction for carbolic acid. Next day I saw the family and reported my findings. They at once recalled that, a week or more before, the child had found a vial containing carbolic acid. She took out the cork and put it to her nose to smell and got a few drops in her nose.

Now, the following questions occur to me:

How long after taking the phenol can it be detected in the urine?

How long before elimination is completed? (It was fifteen days in this case.)

Is it fatal if taken through the nose?

Does a child tolerate it better than an adult?

C. C. Perry.

West Rutland, Vt.

[The vapors of carbolic acid alone are poisonous, and mere inhalation would result in a mild degree of absorption. In this case there was probably some absorption from the nasal mucous membrane.

The length of time before the acid may be detected depends entirely upon the amount ingested and the degree of absorption. A single dose of phenol will usually be entirely eliminated within four to six days, unless it be large enough to produce a fatal result. The delay in elimination in Dr. Perry's case was certainly unusual. It would probably be difficult to get enough of the poison through the nose to produce death. We are unable to find any evidence that a child is less susceptible than an adult—on the contrary, it is probably more susceptible.

In cases ending fatally the majority of deaths usually occur within twelve hours, but the patient may not succumb for from nine to twelve days. A fatal dose of phenol, taken internally, is about 1-2 ounce, but 22 grains have caused death of an adult, while 3 grains injected into the rectum of an 8-year-old child has proven fatal. When introduced into wounds, 15 to 30 grains may be fatal. The tendency of *weak* solutions (1- to 5-percent) of carbolic acid, when applied for a long time to an extremity, to cause gangrene, is well known.

For tests, see Dr. B. G. R. Williams' book on "Laboratory Methods," just issued by the C. V. Mosby Company, of St. Louis.—Ed.]

PHENOL ACTION IN CALLUSES AND CORNS

In glancing over the pages of the interesting August number of Clinical Medicine, I was struck by Dr. T. Proctor Hall's communication (page 864) anent carbolic-acid injections, where he says, in his closing sentence, that "carbolic acid and glycerin, equal weight, is an excellent antiseptic and only slightly irritating."

Now, in my own practice I am using a mixture composed of 13 ounces of carbolic acid, 15 ounces of glycerin, and water enough to make 1 gallon. This solution I employ extensively the year around, and gallon after gallon.

In treating calluses and corns, I cover them with wads of absorbent cotton saturated with this solution. After five to seven minutes I remove the pledget, when the growths will be turned white and ready for the knife. However, I have to be *very careful* in using this on very white-skinned and blond individuals, as the irritation in their case is *not* merely "slightly irritating," but sometimes will produce, in a few days, a slough, that looks like incipient gangrene, and it takes heroic treatment to stop its spreading.

In all other cases, if the solution has trickled over the foot, a very red line will show the course of the solution, and in a week or so the skin will exfoliate.

You see that, after all, the mixture of carbolic acid and glycerin is not as innocent as it seems on the surface of the thing.

P. Cosman.

New Haven, Conn.

[In writing Dr. Cosman, acknowledging the receipt of his interesting report, we said that we had the feeling that the gangrene-like action which he reported was similar to that which occurs occasionally after prolonged application of weak aqueous solutions of phenol. Numerous cases have been reported in which gangrene, sometimes extensive enough to require amputation, has followed the application of these solutions on the extremities.

While a 10-percent solution, modified by the presence of glycerin, can scarcely be called "weak," and the applications made by Dr. Cosman are very brief, the symptoms produced are certainly suspicious. The dilute aqueous solutions of carbolic acid are absorbed more readily than the concentrated preparations. Pure phenol, through its action on the protoplasm, coagulates the tissues and thus acts as its own antidote, by inhibiting penetration and absorption.

Can it be that, by modifying the caustic action of the phenol, the addition of glycerin increases its absorbability and thus adds to its toxicity?

In reply to our letter we received a very interesting letter from Dr. Cosman, throwing more light on the subject, from which we quote at some length:

"Some years ago I was called, in New York City, by a patient who tried, himself, to relieve an ingrowing nail. His knife slipped and, as an antiseptic application, he used a bandage soaked in a 1-percent solution of carbolic acid. This happened at about 8 o'clock in the evening; at 11 o'clock the same evening he tried to get me on the telephone on account of his pain.

"I reached his house not before 11 o'clock a. m. the next morning. His toe was nearly black. It took me two weeks before I made headway. All the necrotic tissue came off, and then the toe healed up.

"You see that your remarks about weak solutions are right. Unless you call a 10-percent solution weak (which I do not), you must be careful to follow the patient up, otherwise you may stumble against a gangrene.

"I believe you may call a 10-percent solution a caustic one. A 10-percent solution of carbolic acid with glycerin added will coagulate the tissues, because the epidermis turns white after a five-minutes' application; but, still, it is liable to produce a black slough, as it has often done under my observation. Carbolic acid in any strength is *dangerous* if not watched after application."

Have the readers of CLINICAL MEDICINE any comments to offer?—ED.]

WORDS OF PRAISE

Amid the rush and whirl a word of praise and congratulation, across the dim and soon forgotten space of time, for the May issue of THE AMERICAN JOURNAL OF CLINICAL MEDICINE. For practical, uplifting, soul-inspiring helpful counsel and information, this helpful friend of the doctor in the field has outstripped itself.

Of especial interest is the article contributed by Dr. J. J. Mullowney, of Pekin, China. Here, in brief space, we see most eloquently and brilliantly presented, the highest and noblest of sentiments as viewed from the moral the ethical, and the humanitarian standpoints of the true physician.

In closing with the memorable prayer of Dr. John Mason Good, Dr. Mullowney indeed reaches the summit of sublime pathos, by embodying a verse from the great Persian poet, Omar Khayyam.

L. B. YOUNG.

Wake Forest, N. C.

TWO PICTURES, AND WHAT THEY MEAN

While I have been an interested reader of CLINICAL MEDICINE for a goodly number of years, I think I have never contributed to its columns except on one occasion, of which I am reminded by finding in my desk the enclosed picture card.

About six years ago I remember sending you one of these, with a New-Year's Greeting, and, if I am correct, it was the first of the very interesting series of doctors' homes which you have from time to time published in your journal.

I think this has been one of the distinctive features that has helped to make your magazine one of the most unique and interesting medical journals in the world—and I say this after reading a great many.

Since the card mentioned was sent you, both John and the Major have passed over to the happy land reserved for good dogs and good horses, and I can say of both:

> "And, if perchance vouchsafed it ever be
> That dog, and horse, and master each shall see,
> My soul shall meet theirs with a happy smile
> And greeting warmer than to bipeds vile."

Since then, the establishment they helped to found has grown from the modest cottage, as seen in the first picture, into the fourteen-

room house shown in the second, with well-equipped offices for general practice, and not the least among the equipment is a row of sixty bottles filled with the granules of alkaloids and other active-principles.

An assistant relieves the doctor of much of the hard work, and a good son will be ready to take up the heavy end in a year. The work formerly done by John now needs Dick, Ben, and Toots, and the old Major's place is taken by Nancy and Bob, while the ledger posts up at the end of the year on the better side of $5000.

That picture of "The Doctor", John, and Major—reprinted

Much of this good fortune has been due to the popularity of the alkaloidal granules, but is spoken of chiefly to show that even a middle-aged country doctor, not in the best of health, can establish a good practice in a little country village by attention to his work, minding his own business, and keeping up with the procession.

I hope, Dr. Abbott, that for many years to come you will live to stir up the profession through your crisp editorials, and that I shall live to read them as long as you are able to put pen to paper.

R. M. Griswold.

Kensington, Conn.

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[Some of our friends who are of the opinion that Clinical Medicine is about right in the main have written us that they do not approve of the pictures of doctors' homes and offices that have appeared in these pages from time to time. I am not sure that we haven't partially promised some of these good brethren to abstain from printing these illustrations in the future. If so, I am going to make proper apology—and sin again, if "sin" it be.

Personally, I am glad to know and *see* just where the members of The Clinic "family" live. I like to see their own pictures. Somehow, this brings me closer to these men—to you. I believe that this personal touch helps to bring about a sense of solidarity and human interest among us, and that, while the pictures do no one any harm, they do many a lot of real good. I should like to know how others feel. Write me a postcard, with your vote: "for pictures," or "no pictures."

I am reproducing the first picture spoken of by Dr. Griswold, which appeared in Clinical Medicine some years ago, also the one he has so kindly sent us now, showing his new home. It shows in a language which everyone can understand just what can be accomplished by an earnest, hard-working country practitioner, under conditions that are by no means ideal. What he has done other able, conscientious and business-like practitioners can do. No man needs to "emigrate" to find his opportunity. Isn't there inspiration and stimulation in this—thought fo

Dr. R. M. Griswold's new home.

you? That active-principle theory has helped —*is* helping—also pleases me much.—Ed.]

EXCESSIVE VOMITING OF PREGNANCY

A recent experience with hyoscine-morphine-cactin not only supplemented my previous good opinion, but may be of interest to others. September 18, last, my wife, aged 36, gave birth to her first child, a lusty boy. During her entire pregnancy she suffered more severely from nausea and vomiting than any woman I ever attended. Confinement was reckoned to be due October 8. Several times during August and September miscarriage, by reason of the excessive vomiting, was barely averted, although I had the assistance of two able physicians.

On September 17 the vomiting was something frightful. She had eaten no food for twenty-four hours. At noon of the 17th I called in E. E. Ellis, M. D., of this town—an exceptionally able practitioner; but we could not control the vomiting. At 5 p. m., in sheer desperation, I suggested to Dr. Ellis that we give a hypodermic of H-M-C, half-strength. This was done, and in fifteen minutes vomiting ceased and the patient was sleeping.

Believing that the excessive straining of vomiting so much would induce labor within twenty-four hours, I endeavored to get her into the best possible condition for delivery. Hence in an hour I roused her to take liquid nourishment. At 8 o'clock there was an effort to vomit, and immediately another half-strength H-M-C injection was given. She rested quietly until midnight, and was then aroused for more nourishment. The same at 5 a. m. At 7 a. m. labor-pains had commenced, and at 10 they were severe, with efforts to vomit between pains. Another half-strength tablet was injected. At 2 o'clock p. m. labor was accomplished and there was vigorous and heavenly music made by the little man. The mother had no remembrance of the birth of the child.

At midnight the patient was suddenly convulsed and became wholly unconscious. Vigorous friction, hot-water-bottles, and a little chloroform were administered, and the convulsion was over. Dr. Ellis was soon with me and directed epsom-salt solution, both by mouth and enema, with other indicated remedies, until the bowels moved freely, and all was well. I have no idea that the convulsion was in any sense due to the H-M-C, but rather to the fact that the excessive retchings had seemed to paralyze all stomach and bowel movement.

Mother and child are now in splendid condition. I am 67 years of age, but not too old to learn, and my lesson is this: That in any similar case I should give occasional injections of half-strength H-M-C, to control vomiting and give necessary rest. Who of the "family" have used H-M-C for excessive vomiting of pregnancy?

J. Franke Locke.

Brookfield, Vt.

VACATION NOTES—THE A. M. A. MEETING

"When found, make a note of."—Dickens.

This year's vacation took the form of a visit to Atlantic City, where I attended the meeting of the American Medical Association, thus combining business and pleasure. Atlantic City is an ideal place at which to hold a convention. There are many convenient places there for holding the section meetings, and when one is not occupied with listening to papers read he can easily find amusement. The board walk itself is always handy to the seeker after diversion.

The scientific program of the meeting was a very complete one. Subjects of interest both to the general practitioner and the specialist were many; in fact, it was quite impossible to get even a taste of all the good things offered.

The general meeting was one long to be remembered. Grouped on the stage were the men who had helped to make American medicine famous the world over: the President, John B. Murphy, of Chicago; President-elect A. Jacobi—the venerable dean of American medicine; Welch, of Johns Hopkins; these and many others. Let me mention what, to my mind, were some of the treats of this meeting. To begin with, there was the speech of Woodrow Wilson, Governor of New Jersey, whose handling of medical terms in his witty and interesting address was little short of marvelous. He speaks with few gestures; his voice is of a mellow character but of sufficient strength to carry every word clearly to his audience. I will not attempt to give details, but, at the close the audience arose in a body and the applause lasted for several minutes. My impressions of this candidate for the presidency were decidedly favorable.

Then there was the address of President Jacobi, which had to do with the general trend of medicine—especially did he deplore the government plan of paying more attention to the hogs and things than to the impecunious

consumptives. His speech, however, was not as enjoyable as that of Governor Wilson, this being due to the advanced age of the speaker. Two nights later, at the president's reception, he stood for an hour and a half shaking hands with several thousands of people. To my mind this American habit of being presented to so many people is a very tiresome and uncalled-for performance.

Among the number of interesting papers I heard was one by George W. Crile, of Cleveland, bearing the title, "The Results of Operations, Especially Abdominal, Performed on the Principle of Anoci-Association," a brief abstract of which follows:

In the body there are large stores of potential energy. This energy is released and converted into action through associative memory. Associations (stimuli) may be beneficial (bene-association), or they may be harmful, or nocuous (noci-associations). Surgical operations as usually performed cause noci-associations. By special technic, operations may be performed without noci-associations; this neutral state is designated anoci-association. Especially in abdominal operations, in operations for Graves's disease, and in handicapped patients, remarkable results are achieved. General operative mortality is reduced and postoperative impairment is greatly diminished. (Anoci means non-nocuous.) This paper was listened to with marked attention and great applause was accorded the speaker at the close.

Dr. Rogers, of the New York Life Insurance Company, before the Medical Examiners Association, read a paper titled "Medical Examiners from the Point of View of the Medical Director," in which he compared the difference in the work of the city and country practitioners along insurance lines. His opinion was that the city physician was more accurate, quicker to answer correspondence, and a better general all around examiner for the companies.

"What the Life Insurance Companies Can Do to Increase the Physical Welfare of Their Policyholders," by Dr. Eugene L. Fisk, of the Postal Life Insurance Company, was a valuable paper dealing with the subject of health conservation among policyholders.

Briefly, the speaker suggests a campaign of education where the policyholders will submit to periodical physical examination both for the benefit of the company and himself; the establishment of a department of health in the home office where the policyholder may obtain desired information, and the issuing of bulletins giving information relative to preventive medicine. A timely paper indeed.

From Atlantic City, I took a little trip to Baltimore, where, in Johns Hopkins hospital, one morning was spent at the clinic of Howard Kelly, one of the foremost gynecologists in the world.

Entering the hospital, one has his coat and hat checked. A regular operating gown is then put on and the visitor ushered to the reception room adjoining the operating room. Here are to be found plenty of easy-chairs and papers; on the walls are pictures of noted men—Osler, with his autograph, groups of former house-staffs, Welch, and near the door a picture of our own Doctor Schenck, who served as resident physician and assistant to Kelly for some years.

A bell rings and we are ushered to a large square operating room. The room, which has a marble floor, is extremely plain and simple in its furnishings. The visiting doctors are seated upon an iron frame work arranged in tiers. At the opposite side of the room is a powerful electric light. Over the audience is a mirror so arranged that it collects the light and focuses it directly upon the patient. In this way an excellent view of the scene of operation is obtained.

Dr. Kelly's staff consists of a principal assistant, three others, nurse who administers the ether, two nurses, and two orderlies. Everything moves like clockwork. There is absolutely no confusion and no talking except as the operator himself explains from time to time the various steps of the work. Dr. Kelly is very easy in his work, takes his time, and it is a pleasure to watch him. He is short, rather stout, and his hair is gray; he moves lightly on his feet; is pleasant in appearance and manner.

During the morning he performed six operations, giving a brief history of each; showing the interesting points of the case, explaining the reason for operating, and while operating gave the audience an opportunity to see every step of the same. The operations done were as follows: inguinal hernia—radical cure; ovarian cyst—section; vesico-vaginal fistula—closure; carcinoma of cervix—pan-hysterectomy; leucorrhea—cauterization; metrorrhagia—dilatation and curettement.

Between operations he gave a little talk on the use of radium. For some time he has been experimenting with it in inoperable cases of cancer and has had very satisfactory results in some instances. He told of some cases of carcinoma where it was impossible

to operate because of the extensive proliferation present.

Exhibition of radium in these cases seems to stop the further ravages and to dry them up. Some of these patients were treated more than two years ago and the persons are still well, apparently. The radium had also been used in removal of nevi, warts, epithelioma, etc. He was highly enthusiastic over the use of radium, but was careful to add that we knew very little about its action, and that it must be handled with care.

My visit to Kelly's clinic was distinctly interesting and instructive. Both in Philadelphia and in Baltimore the physicians and surgeons attached to the various hospitals had arranged, at the request of the A. M. A., clinics to be held on Friday and Saturday following the meeting. This was done so one could have a little postgraduate course for two days. In fact, it was possible to start at 9 in the morning and be busy all day, as a glance at the following program will show.

Friday Morning, June 7—

Medical Clinics, Drs. Barker and Thayer:

9:00–10:00. Medical-ward rounds, Dr. L. F. Barker.

10:00–10:20. Chemotherapy of pneumonia, Dr. W. P. Clough.

10:20–10:40. Typhoid fever (eye reaction in diagnosis; prophylactic inoculation) Dr. C. R. Austrian.

10:40–11:00. Diagnosis of gastrointestinal conditions by x-ray, Dr. F. H. Baetjer.

11:00–11:15. Indirect transfusion of defibrinated blood, Dr. W. L. Moss.

11:15–12:00. Medical clinic (metabolic diseases), Dr. T. B. Futcher.

12:00–1:00. Medical clinic, Dr. W. S. Thayer.

Surgical Clinics, 9:00–1:00:

Operations, Drs. Bloodgood and Follis. General surgery, neurological surgery, Dr. Harvey Cushing or associates. Genitourinary surgery, Drs. Young and Geraghty.

Friday Afternoon—

Orthopedic surgery, Dr. W. S. Bear.

Gynecological Clinics:

Operations, Dr. Howard A. Kelly, 9:00–1:00.

2:30 o'clock: Demonstration of experimental, clinical, and pathological material in relation to surgery in the surgical amphitheater, Dr. Joseph C. Bloodgood.

Under the heading, "Public Health Demonstrations," the American Medical Association had arranged the following exhibition covering the social evil and venereal peril. This consisted of a very exhaustive, artistic and conservative presentation of this subject by means of lantern slides and kinemacolor motion pictures. These revealed the awful and far-reaching effects of venereal disease. The various types, from the simple chancroid to the tertiary stages of syphilis, were shown in a realistic manner.

The subject of prostitution, its dangers, the futility of examinations of inmates, which give a false sense of security. Extracts from the Chicago Vice Commission Reports showed how impossible it is to control prostitution by laws alone. Education of boy and girl, man and woman, with the necessary knowledge of sex-problems is the only practical solution. Until the mystery surrounding the functions of birth and sexual life are taught plainly and reverently to everyone concerned—only then can we hope for a solution to this curse of modern civilization, the oldest profession in the world—prostitution.

One of the other features of this program showed, by means of the moving-picture machine, the development of a chick—the various steps, from early incubancy until the chick picks its way through the egg-shell, were demonstrated in a very graphic way.

This presentation is part of the "welfare work" of the National Cash Register Company of Dayton, Ohio. The lecture is given to their employees, both men and women. The company is deserving of great credit for the very instructive and lucid way they have found of impressing upon the young men and women the consequences of illicit intercourse.

The kinemacolor and its companion, the moving-picture machine, have a future in medical teaching. By means of it the circulation of the blood, the attendant ravages of disease, and the effects of serum could be demonstrated in a manner never to be forgotten. The white blood-corpuscles doing their work of repair were shown in a set of motion pictures.

The second demonstration was a cartoon exhibit dealing with public-health problems, divided as follows: (a) Public water and milk supply. (b) the health of the people versus the health of domestic animals, plants, trees, grain, etc. (c) Quackery and the patent-medicine business. These drawings were by the leading newspaper cartoonists of the country. Uncle Sam was shown exercising more care for the hogs than for the poor consumptives. Conservation of trees was more important than human life. The quacks came in for the "hot shots" they deserve—poisons in soothing syrup—consumption cures, and the like.

In the gallery of the Exhibition Building was a fine display of x-ray negatives illustrating the scope and achievements of roentgenology in the diagnosis and treatment of disease.

Adjoining this was a very fine pathological display of the newer methods of preparing and presenting museum material. Also the development of several exhibits in the illumination of special phases of pathology.

There were several cases from the Army and Navy Museum illustrating various gunshot wounds of the skull and bones. Microscopes with the newer discoveries placed at intervals, had many users; in fact, we had to wait our turn, so great was the interest in the things shown.

The strictly commercial exhibit was worthy of one's attention. Here the latest inventions in instruments of every kind could be seen. The greatest attention is now being shown in blood-pressure apparatus, the sphygmomanometers, several being demonstrated in the various booths.

The great value of these conventions depends, not so much upon the stated meetings, as upon the opportunity of mingling with the men of the profession; to meet the leaders, face to face, the men who are up and doing, the writers of books, the surgeons, the internist, the specialist, and the rank and file. When we get back home, pick up a book or journal and read an article, there is the added interest of knowing the writer. Then there are the little heart to heart chats with the fellows off duty, the opportunity to really get acquainted. If for no other reasons, I am in favor of these meetings, and hope to be able to attend others.

Take for an instance: Standing in front of a book display, I had the opportunity of meeting Dr. Joseph B. De Lee, professor of obstetrics in Northwestern University, Chicago. A most delightful half-hour was spent listening to his ideas relative to the work of the getting out of his new book on obstetrics. It is hard to realize the vast amount of arduous work necessary for such a book to be born. This work will be, I think, the finest volume on this subject printed to date. The illustrations are wonderful, the bibliography shows how carefully literature has been searched, and the writer has discarded a lot of obsolete ideas. One realizes that Dr. De Lee is deserving of more credit than he is ever apt to get, when one hears from his own lips what it has cost in time, health, and money to prepare his book.

The 1912 meeting of the American Medical Association was a success from every standpoint.

William J. Stapleton, Jr.

Detroit, Mich.

THE TRANSMISSION OF TYPHOID FEVER BY FLIES

Dr. E. W. Cochrane (*Journal of the Royal Army Medical Corps*, 1912, No. 3) observed a slight epidemic of typhoid fever on the Bermuda Islands, which had broken out in the families of two officers, the children, the servants and the orderlies being affected successively. At first the bad quality of the water was blamed for the condition, but this interpretation could not stand, because the same water was not used in the two families. Contamination of the milk had to be eliminated likewise, for each one of the families possessed a milch-cow for its own exclusive use.

Inquiries showed that in a near-by house two cases of typhoid fever had occurred some time previously. Because of the constant direction of the wind at the time when the epidemic in question was observed, the possible role of flies in the dissemination of the infection suggested itself.

A number of flies were collected in the kitchen of the two households, in the rooms of the orderlies, etc., and these were subjected to bacteriologic examination. The bacillus of Eberth was promptly discovered. The role of the flies in the dissemination of the disease was thus proved. The epidemic ceased promptly upon proper sanitary measures being carried out.

Not many years ago it was the fashion for medical orators to denounce the occurrence of typhoid fever as the result of criminal negligence. That was when we considered water as practically the sole means of infection. We now know that, in spite of ordinary intelligent care, innocent people may be infected.

There are many factors to be considered. With our present knowledge (or lack of knowledge), it would seem wise to use the typhoid prophylactic inoculations much more generally in communities and homes in which sporadic cases of the disease have occurred.

THE TYPHOID-FEVER PROBLEM

"We are accustomed to speak of certain countries as pest-ridden, and a residence in them or even a brief visit is considered with

apprehension. But do we consider the prevalence of typhoid fever in our own country with sufficient seriousness? The annual 25,000 deaths from typhoid fever do not represent our total loss. At a conservative estimate they are accompanied by a quarter of a million of cases of the disease each year.

These cases represent an average illness for each individual of four weeks and probably six or eight weeks enforced abstinence from any painful occupation. The economic loss is appalling, and, computing the value of the lives lost to the community, the cost of medical attendance and hospital care, the loss of earning capacity for many weeks, the decreased earning capacity and impaired efficiency due to sequelae, would reach a sum of not less than $100,000,000 annually."—*Public Health Reports*, Mar. 22, 1912.

[While the increasing attention given to control of the food and water supply and the campaign of education against the "typhoid fly" are undoubtedly doing much to prevent typhoid fever, there are still likely to be thousands of cases, unless we can introduce some more positive method of prevention. Happily we have this in the prophylactic vaccination against the disease, which has been used with such brilliant success in the United States Army. The time will come when the residents of institutions, the pupils in schools, and entire communities which have been exposed to the infection, will submit to these inoculations, just as they now are vaccinated against smallpox.

As to the treatment of the disease when contracted we have expressed ourselves so often that we hardly need to add another word. When early and energetic treatment is instituted, the bowels being carefully cleaned out and disinfected with the sulphocarbolate the disease almost invariably is cut short, running a mild course and terminating favorably.—Ed.]

AN ATYPICAL CASE OF TYPHOID FEVER

On January 14, 1912, I was called to see a mechanic who was employed on inside work. A year prior to this time he had had an attack of rheumatism which kept him in bed fifteen days. He had been well until three days before I saw him. There was pain, which began in the right ankle and had shifted to several joints. Pulse, 110; temperature, 100.5° F.

I gave him the following: Sodium salicylate, oz. 1; potassium iodide, drs. 1 1-2; water, to make four ounces. A teaspoonful was ordered every four hours. An ointment containing menthol and oil of wintergreen was ordered applied locally. The next day he reported feeling so much better that I did not call on him.

He remained in good condition until the 18th, when the left ankle and right wrist began to swell and to pain him. When seen on the 22d, his pulse was 100; and temperature 99.5° F. I put him again on the former treatment. The next day he felt better, but there was some tightness in the chest, due to a cold he caught from sleeping in a damp room. I gave him brown mixture with ammonium chloride, in tablet form. Bowels moved properly each day. For the next few days he complained of little pain, could move all his joints, and cough was free.

By the 28th of January he complained of stiffness of the thumbs, and on the 2nd of February said that the medicine nauseated him. I changed to aspirin. Temperature normal, but pulse fast. On the 4th (of February) he asked to be put again on the original medicine. On the 6th there was no pain, but he was stiff in all his joints. Bowels moved freely—passages thin. The urine showed a specific gravity of 1030; a very heavy albumin ring, and there were granular casts.

On the 9th I found that he had taken cold again; felt sick all over, and was nauseated. I now stopped the salicylates, and put him on aconitine, bryonin, and hyoscyamine. Temperature, 101° F.; pulse, 108. The temperature rose some next day. Candler's rheumatic tablet was now given. On the 12th his pulse was 112; temperature, 100° F.; could not move himself at all. The urine had a specific gravity of 1032; was thick and reddish-yellow; acidity, 78; albumin in abundance. The next day there was severe pain in the left spermatic cord, requiring the use of hyoscine-morphine-cactin.

The next two or three days there was slight improvement, but on the 16th there was a heavy eruption over the back and abdomen—typical rose-spots; tongue coated and breath foul. The succeeding day the laboratory reported the Widal reaction positive, with reaction rapid. On succeeding days there was some tenderness and swelling over the gall-bladder region. The urine soon began to clear, specific gravity was lower, and albumin disappeared. Specimens of blood taken on the 28th were reported to show a pure culture of streptococci.

The patient continued to improve, sat up on March 2, and, aside from occasional attacks of pain and swelling, did very well after this time. On April 1 he returned to work. On March 18 a blood examination showed hemoglobin, 70 percent. He was put on Blaud's pills.

What is the diagnosis?

Clifford T. Henry.

Minneapolis, Minn.

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[This apparently is an atypical case of typhoid fever. Before we had the Widal reaction for diagnostic relief, it was difficult, if not impossible, to state positively just what the trouble was. In this case the skin eruption was about the only symptom that was typical. Except for that, we should be inclined to call it "rheumatism"—yet what is rheumatism?

The finding of the streptococci in the blood suggests that this was a mixed infection, and that this accounts for the peculiar and troublesome complications. Rheumatic and pulmonary symptoms are not infrequent in typhoid fever, however.

May we again be forgiven if right here we interject another homily on *intestinal autotoxemia*. We use that expression a good many times, yet we do so because we feel that it is the most important single factor in disease. Disturbed function of the bowel, with the absorption of fecal poisons, is sufficient to distort the picture in almost any disease and to accentuate its severity. We are inclined to believe that this *may* have been a considerable factor in this case, and that, if this patient had been cleaned out thoroughly and repeatedly, and that, moreover, in both directions, this attack might have taken a different and a milder course. By these measures, and with the intestinal antiseptics, much might have been done—perhaps! Dr. Henry knows the game, and it is not safe to make either a long-distance prognosis or diagnosis.—Ed.]

EQUAL TO A COURSE OF LECTURES

I am enclosing you a year's subscription for your journal, the best and most helpful medical periodical that comes to my desk.

I don't see how a good, live doctor can do without The American Journal of Clinical Medicine. It's the next thing to a course of lectures in some of our good postgraduate schools. The class of contributors to your journal are the "gems" in the profession. Let it come along to me every month.

Here is good luck to The American Journal of Clinical Medicine and its host of readers and contributors.

Joseph W. Gregory.

Cisco, Tex.

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[We want to make Clinical Medicine, in the future, even more than in the past, a real "course of postgraduate lectures." There doubtless are subjects concerning which every reader feels that he needs help. Tell us. Suggest some man—preferably a member of the "family"—as the author of that "course." Write something yourself, right, white-hot, out of your own bubbling caldron of experience. This invitation is extended to *everybody*.—Ed.]

WOMEN AS ANESTHETISTS

In an article concerning the small county hospital, Dr. F. A. Long, of Nebraska, asserts, that "the operator of the future must move to the country."

Unfortunately for the aforesaid hospital, modern surgical technic more and more demands team-work, singleness of purpose, and mutual consideration usually hard to obtain in a country town. The mere fact that all hands are graduate physicians may mean nothing. They must be congenial, as well as competent.

Especially is this true of the anesthetist. While it is a matter of supreme importance that the patient, especially if a woman or a child, should have a restful confidence in the anesthetist, it is hardly of less importance that the various members of the surgical machine should have the same confidence. The surgeon relies especially upon the anesthetist.

Is it not more fitting, then, that this important person should be completely neutral, someone not a competitor, and one whose sex naturally commands respect?

The average interne is too much interested in operative technic, or else a pretty nurse, to give the patient his full attention, while the preanesthetic suggestion, upon which so much depends, has barely entered his mind at all. Besides, he serves only a brief period, and only as a part of his other duties. In fact, the life-history of his whole species is a polishing of the raw.

When the anesthetic is administered by the average physician, things are not much better. Often the situation is sufficiently strained, not to speak of the awkwardness of the occasional effort, that the patient himself is distinctly conscious of it and even may

apologize for having sent for this particular doctor rather than some other. The evil suggestion here is marked.

We are in agreement with Crile, writing in a recent issue of *The Journal of the American Medical Association*, where, speaking of shockless surgery, he says: "The management of a patient, up to the point of anesthesia, should be only by those nurses, orderlies, and physicians who are humanitarian psychologists; the anesthetist should be even more of a psychologist, and preferably a woman, for somehow the world has an intuitive confidence in the ultimate good intentions of a woman as compared with those of a man. Who can say how much difference there is in the effect on a patient about to undergo a serious operation, between looking into the face of a virile young interne as compared with the faith-inspiring face of a Florence Nightingale?"

This from a matter-of-fact surgeon who confirms his hypotheses by laboratory experiment!

What advantages has the profession of anesthetics for a woman? What are the dangers? What must she know? Questions like these come to the mind.

The anesthetist already is a fixture on the staff of a well-regulated hospital—special skill and apparatus being required—and the work is being refined and placed upon a higher, safer, and more scientific basis than ever before. The carelessness of ten years ago now seems appalling.

Chloroform practically is discarded except for obstetric emergencies in the country; ether soon will follow, leaving nitrous oxide and oxygen in the field. The anesthetist must have, not only a theoretical and practical knowledge of the various drugs she uses and have made an elementary study of anatomy and physiology, but she should have served a term under a competent anesthetist not only to gain facility in the use of the anesthetics and apparatus, but also to gain sufficient knowledge of surgical technic to be able to "accompany" the surgeon. Furthermore, she should be a high-school graduate, have studied chemistry, be refined and quiet, naturally sympathetic, and of good self-control.

These things granted, and equipped with reasonably good health and a proper appreciation of her high calling, there is no reason why the young woman who chooses anesthetics as a life-work should not "make good" and be respected above the average trained nurse. In fact, especially for the small country hospital, so much depends upon the anesthetist—even the success of the hospital, as men who have had a death on the table early in their institutional career will testify—that her character and competency will be appreciated accordingly. As a matter of course, her compensation should be ample and as sure as that of a graduate nurse.

If she interested herself in electrical applications, radiography, business management, massage and especially pelvic massage, her usefulness to the country hospital would be tremendously enhanced. Yet, without these extras, any reasonably successful hospital would furnish her sufficient employment to make her teaching friends envious and to insure her an honored and useful place in the community.

To be the angel lightening the heavy load and softening the stony path were worth while.

F. J. Moffatt.

Clyde, Kan.

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[I agree most heartily with Dr. Moffatt. It has been my experience that a well-trained woman helper who has come to realize the importance of her work is really the most trustworthy helper, especially when her work requires careful attention to detail as well as absolute fidelity.

The great bar to successful surgical or "special" work in the country has been the difficulty of securing adequate trained assistance. This can be overcome by training women to help you. Every country doctor of large practice should have "on his staff" a good woman office attendant who understands and can sympathize with his work—a trained nurse by preference, and a woman who can administer his anesthetics and assist in operative work. These women can be developed by the doctor himself, so that they will know exactly what he wants done and how to do it. —Ed.]

A NIGHT-LIGHT FOR DRIVING

For a number of years I have been trying to find a suitable light for night driving. No doubt most country physicians have been puzzled in searching for the same thing. I have tried oil-lamps, acetylene gas, and came pretty near trying a tallow lamp. But at last I have a light that fills the bill completely.

I put a motorcycle search-light on the end of my buggy-pole, back of the neckyoke (underneath, of course); fastened a small brass tube on the under side of the pole; then put an automobile gas-tank under the buggy-

seat; connected the tank to the tube by a rubber tube; ditto search-light—and there you are!

The team cannot shut the light off by crowding, and it lights up the road the same as an automobile.

The first expense is a trifle heavy, but the tank can be charged for $1.50; and the satisfaction of having a good light more than pays for the cost of it. This is a suggestion which some of my brother country physicians may wish to try. If they do, I should like to hear how they like it.

G. L. Cornell.

Lewiston, Mich.

DESTROYING THE ODOR OF CANCER

I have read with interest Dr. J. E. Tibbins' communication, in the June number of Clinical Medicine, under the caption, "The Escharotic Treatment of Cancerous and Other Growths." In the course of his essay Dr. Tibbins alludes to the horrible odor diffused by a victim of cancer, an odor so penetrating that often it permeates the whole house.

In this connection, let me suggest a palliative. I have in mind a very effective and simple remedy; namely, the regular employment of ordinary cinnamon water as a local wash, and also as a deodorizing agent for the premises by spraying it freely from an atomizer. This cinnamon water I have repeatedly used in cases of cancer and of gangrene, and have found it preferable to listerine and its congeners. With 25-cents' worth of oil of cinnamon and magnesium carbonate a physician can provide himself with gallons of this deodorant. Try it, doctor.

George D. Stanton.

Stonington, Conn.

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[In the last Pharmacopeia, purified talc is directed for triturating the cinnamon oil, instead of, as formerly, magnesium carbonate. Either substance will serve the purpose. The officially directed manipulation is as follows: Triturate 2 Cc. of cinnamon oil with 15 Grams of purified talc, then add 1000 Cc. of water, with continued filtration. Filter and refilter, until the filtrate is perfectly clear.

Another, formerly official method, is to drop the volatile oil on filter paper, cut into shreds, and pound this to a pulp in a mortar, adding boiling water gradually. But, for this crude disinfecting purpose, it is enough to put the oil in a quart of hot water in a two-quart bottle and shake until nearly cool, filtering not being necessary. In fact, for this purpose milkiness is no objection. However, cinnamon water is so cheap and so readily obtained at any good drug-store that the doctor will usually find it simpler to purchase his supply.—Ed.]

PREVENTION OF QUININE ERUPTIONS. COLIC IN A MULE

For the last forty years I have used the following, which may be put up in a capsule, tablet or powder: Quinine, 4 grains; camphor, 2 1-2 grains; piperine, 1-2 grain.

This is a positive preventive when quinine produces skin eruption, one that I have never known to fail in ordinary cases; if it does, another dose of the same amount of camphor will promptly relieve. Half as much camphor as quinine in each dose is usually all that is necessary; with the piperine this is certain.

For a number of years I have been using monobromated camphor, in grain doses, in children, and find it equally as good. The camphor alone will promptly give relief after the eruption and nervous symptoms have appeared. The camphor in the camphorated oil, as used by Dr. Sherwood, in the case reported by him (page 750, July number of Clinical Medicine), was what gave the relief.

There is nothing original in this, as it was customary to use camphor together with quinine in malarial troubles in my student days.

Recently I gave hypodermatically eight full-strength tablets of H-M-C to a mule in the last stages of colic and repeated it in four hours. The mule made a prompt recovery, but was stupid and sluggish for twenty-four hours afterwards.

H. B. Williams.

Kaufman, Tex.

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[The suggestion concerning the camphor is a good one. I remember that in the old days we used to employ such a combination very extensively, and with good results. It is said that quinine hydrobromide, of all the salts of quinine, is the one least likely to produce toxic symptoms. For that reason, this is the preparation that I generally employ.

Thanks for the report of the colic in the mule. Veterinarians use H-M-C a great deal in the treatment of colic, at the same time emptying the bowel by giving a hypodermic dose of arecoline or physostigmine. What a pity that the latter remedies are not equally

available for the human practitioner. But—we have H-M-C!—Ed.]

NO MORE ASCITIC FLUID WANTED

We wish to thank those of our friends who very kindly sent us ascitic fluid for use in our laboratory. We are now supplied with a sufficient quantity to meet our immediate needs. If we should require more, we will advise our friends through the columns of Clinical Medicine.

We have received several specimens of ascitic fluid from unidentifiable sources. If the physicians who kindly sent this to us will give us their names and addresses, we shall be most happy to remunerate them for their time and trouble.

J. Favil Biehn.
Director, Scientific Laboratory,
The Abbott Alkaloidal Company.

DR. BENNETT'S "ELECTROTHERAPEUTIC GUIDE" NEARLY READY

We are pleased to be able to announce that the ninth edition of Dr. H. C. Bennett's "Electrotherapeutic Guide," which has been in preparation for some time, is now almost ready for delivery. Dr. Bennett writes that copies will be available possibly the last of August and certainly in September.

This book promises to be a decided improvement upon preceding editions. The doctor started out to produce a 380-page book, but when he got through with it, there were more than 450 pages, the illustrations numbering more than 400. In spite of this increase in cost and decided improvement in character, the price will remain $3.00.

This book is written in a conversational style, with questions and answers, and contains a full therapeutic index of 500 indications for electrotherapeutic treatments, with details of technic. It also contains something never published before—a complete electro-medical dictionary and index combined.

Readers of Clinical Medicine who are familiar with Dr. Bennett's work, as published from time to time in these pages, will certainly want copies of his book.

ELECTROTHERAPEUTIC NOTES

Electrification sets in motion forces that continue to act for hours, and sometimes days, after treatment. Nervous diseases may be aggravated by too frequent treatments. Ordinary chronic cases require only three or four treatments per week. Acute or subacute cases may be treated daily, but never more than once a day, as nothing will be gained by treating a patient more than once the same day.

Properly applied, electrification stimulates the circulation of the blood, promotes nutrition, exercises the muscles, and, by a chemical process, the waste and repair of the body is promoted, and nutrition of the entire system is improved through indirect as well as by direct effect of treatment, producing a tonic stimulating effect in all chronic diseases.

General galvanization or faradization applied in the ordinary manner may be successfully employed in the treatment of rheumatism. Muscular rheumatism offers the best results from electrical treatment. Best results are often obtained through general faradization given in the electrothermal bath.

In cases where inflammation and pain is present, the positive should be the active pole and passed over the entire body, beginning with the positive pole at back of the head and passing it down the spinal cord, then over the parts affected, giving these special attention. The negative pole is preferable at the coccyx or the feet.

In treating swollen or inflamed joints, the current should also be passed transversely through the joint. In treating callosities, ankylosis, and where effusion has taken place, the galvanic current is most efficient, and the negative pole should be applied where it is desired to cause absorption. General treatment usually increases the flow of urine and the elimination of uric acid, thereby relieving the rheumatism.

In brain galvanization, place one electrode over the supraorbital or temporal region on one side, and the other electrode over the postauriculars, mastoid or suboccipital region on the opposite side, thus treating obliquely through both hemispheres. In applying transverse galvanization to the brain, the negative pole causes dilatation of the adjacent vessels and consequent increased circulation, while the positive pole causes contraction of the blood-vessels.

Ordinary sponge- or cotton-covered disc-electrodes, held firmly against the skin—not lifted while the current is on, to avoid shock—are used. Wet the hair, if treating through it. A rheostat and milliamperemeter should be used, to insure the greatest care and caution while using galvanization.

Cerebral anemia is treated by longitudinal galvanization of the brain; the negative pole over the forehead and the positive pole over

the occiput for two or three minutes' duration. Use electrodes covering one area of 1 1-2 to 2 inches, giving from 2 to 4 milliamperes. Failing this, use general faradization for ten to fifteen minutes. Cerebral hyperemia is treated the same way as anemia, except that you reverse the position of the poles—never reverse, however, during a treatment.

Cerebral hemorrhage and softening is treated by galvanization of the brain and central galvanization. This promotes absorption of the blood and serous effusion, and edema and inflammation are overcome. This treatment should not be begun until any danger of cerebral fever is past—usually three or four weeks. With the positive pole over the site of the pain, treatments are given longitudinally, transversely or diagonally, according to indications, by the mild galvanic current. Using the large positive pole to the forehead and the negative to the nucha, treat for ten or fifteen minutes, with not more than 2 milliamperes current.

Rest and galvanization will cure writer's cramp, using the anode in the palm if fingers are extended, or on back of hand if fingers are flexed. Static vibration will also cure this affection: positive pole in the affected hand and negative either in the other hand or on the spine or over the head-crown, for ten or fifteen minutes, then rest for several hours.

The stomach is electrized by placing a large broad electrode between the ensiform cartilage and the umbilicus. The lungs may be electrized by placing a large electrode over them, between the clavicle and the lower border of the sixth and seventh ribs.

Acute muscular rheumatism is best treated by general faradization, given in the electrothermal bath.

Galvanic, faradic, and static electrification will all relieve and cure neurasthenia. When indicated, use your best judgment, and proceed to give treatment; one kind failing, try another.

The liver may be treated by pressing an electrode inward and upward against the tenth rib. The colon may be treated by passing the negative electrode over it, beginning in the right iliac region and passing up the transverse colon, then across to the descending colon, thence downward to the sigmoid flexure and rectum.

Sprains are best treated by the use of positive galvanization, which relieves the pain; or by the violet light, which also is very good in some cases. Also the use of the Bennett magnetone is highly recommended in the treatment of sprains.

O. W. Westlind.

Duluth, Minn.

A HYPODERMIC CATHARTIC—HORMONAL

The desire for a laxative or cathartic that can be exhibited by means of the hypodermic syringe, often expressed in this journal (so recently as in the May number, in answer to Query 5799), is being satisfied at least partially.

It has been found that, in the higher animals, the gastric mucous membrane (or at least a certain definite portion of it) secretes a substance regulating peristalsis; this occurs in more appreciable quantities in the spleen during digestion, and therefore it is obtained from that organ from an animal killed while digesting its food. This substance is extracted and prepared, under aseptic conditions, for hypodermic, intramuscular or intravenous uses.

This hormone is on the market under the name of "hormonal," in vials of 20 Cc. capacity, which is one adult dose—although once divided for intramuscular injection, each gluteus receiving 10 Cc. when intended for such use. It also contains beta-eucaine, to render the injection painless.

In two of my cases it was given intravenously and the bowels began to move in one instance in four minutes and in the other in six.

When administered intramuscularly, it is affirmed that there is a more or less permanent effect.

There may be a little constitutional disturbance, in the way of a rise in temperature (socalled hormone fever), and some pains, so the patient should be kept in bed.

When hormonal is used by the intramuscular route, it is well to give first a generous dose of castor oil, in order to loosen up impacted feces. This is all in line with your slogan, "clean out, clean up, and keep clean."

Willard Chaney.

Detroit, Mich.

—

[This interesting remedy is marketed, so we are informed, by Schering & Glatz, New York City.—Ed.]

UNFAVORABLE EXPERIENCES WITH HORMONAL

I wish to report three cases in which I have used hormonal, with unsatisfactory results.

Case 1. A man of forty, complaining of habitual constipation of three-years' duration. His bowels move only after the use of epsom salt. The physical examination showed nothing especially abnormal. Using proper antiseptic precautions, I injected 20 Cc. of hormonal into the gluteal regions, 10 Cc. on each side. In addition, 16 Cc. of castor oil was administered, to stimulate the action of the bowel. The patient was directed to go home and to bed, and was ordered not to eat anything until the following morning. A little water or milk was allowed. In the afternoon of the same day I called and found: temperature of 102° F., blood pressure of 105 (it was 120 prior to the injection), headache, and pulse 72, but weak.

The patient later reported that no movement of the bowels resulted from the injection. He was directed to wait another day before taking a purgative. He then reported to me and I found his temperature 99.5° F., pulse 72, slightly stronger, and blood pressure 110. The patient complained of pain at the points of injection. On the third day pulse and blood pressure were normal.

Case 2. A young lady, age 25, single. Constipated for two years, requiring purgatives to secure bowel movement. Physical examination negative, except that abdomen was dull and distended, due to impaction. Temperature normal, pulse 75, blood pressure 130. Uranalysis gave negative information. Blood count showed 4,000,000 erythrocytes, 7500 leukocytes, and 85 percent hemoglobin.

She was treated with hormonal as in the preceding case. Temperature promptly rose to 101.8° F., blood pressure fell to 115, pulse remaining at 75 but weak. Headache. Castor oil (32 Cc.) was given, as in the preceding case. The following day there was one movement, doubtless due to the oil. Temperature was now 99° F., pulse 75, stronger, and blood pressure 120. Pain was reported from the needle punctures. No benefit from the hormonal.

Case 3. A girl of 17 received the same treatment as in the preceding case, with the same clinical results, i. e., rise of temperature, lowered blood pressure, and headache.

In all cases the blood count showed an increased number of "polys" after the injection.

No benefit followed in any of these cases, and in my opinion it presents dangers on account of the marked fall in blood pressure. The headaches are doubtless due to this decreased pressure, resulting in cerebral anemia. Four deaths have been reported as due to the use of this remedy.

M. Malina.

Chicago, Ill.

[Dr. Malina's report illustrates the dangers attending the use of powerful remedies of this character. He is correct in stating that a number of deaths have followed the use of hormonal. Under the circumstances, the general practitioner may well wait until its exact field of usefulness has been outlined by clinical investigators.—Ed.]

TUBERCULOUS ENTERITIS

At a recent meeting of the French Academy of Medicine, Loeper and Esmonet (*Paris Medical*, 1912, No. 24) reported several clinical observations which suggest that chronic enteritis easily acquires a tuberculous character, not by facilitating the entrance of tubercle bacilli, as is the case in acute enteritis, but by promoting the demineralization of the organism taking place largely through the intestinal mucosa.

It will be recalled that, according to several noted French clinicians, a deficiency in the organism of mineral salts occurs, not only in consequence of tuberculous disease, but also is a predisposing factor favoring the development of tuberculosis.

This is of special interest in connection with the work of Goodwin, of Philadelphia, who is using sodium and zinc sulphocarbolates with such fine success in the treatment of tuberculous ulceration of the intestine, which he believes (and apparently shows) to be a prime factor in the febrile disturbance characteristic of phthisis pulmonalis.

This idea occurs to us: Would it not be good practice to employ calcium sulphocarbolate in these cases? There is a notable deficiency of the calcium salts, and this preparation would supply lime, while disinfecting the intestine and aiding in the cure of the ulceration. We ask for opinions and experience.

A SET OF CONNECTICUT TRIPLETS!

The interesting account by Dr. Geo. D. Morgan about the quadruplets, as printed in the current issue of The Clinic, brings to mind a case of triplets, all boys, that came to town in Stonington a number of years ago, who lived to grow to manhood's estate, served their country in the northern army during the Civil War, and came home unscathed.

The father happened to be absent from home when the stork made the generous presentation, and when, on his return, he was ushered into the room to behold what the stork had perpetrated "since he had been gone," he took a cursory survey of the sleeping cherubs and then casually remarked to the nurse, "Say, you don't suppose that any of them got away, do you?"

Their names, as they appear in the Stonington records of vital statistics, were Thomas Washington, George Jefferson, and James Adams! Their godmother's epitome of nomenclature evidently got a little mixed, due, perhaps to the "unexpectedness" attending the unusual infantile "round-up." But, if there had been quadruplets! Well, for a name for the fourth, I will leave that for the reader to suggest.

GEO. D. STANTON.

Stonington, Conn.

QUINTUPLETS!

In the July number of CLINICAL MEDICINE Doctor George D. Morgan, of Lane, Tennessee, gives a report of quadruplets. In your comments on the newspaper reports on births of five by one mother, you express yourself as if your faith was weak indeed.

Now, Mr. Editor, it is my good luck to be able to give you an account of a case of five infants, all boys, born at one time. This occurred at Mayfield, Kentucky, April 29, 1896. Dr. S. J. Mathews was the accoucheur. The woman was of medium size, and was born in Warren County, Kentucky. Her maiden name was Miss Bettie Campbell and she married Mr. Oscar Lyan and they are both living at Kevil, McCracken County, Kentucky.

Their children were all well formed and perfect in every way so far as known. Hundreds of people went to see them and handled them; and this, together with an incompetent nurse, it is thought, caused the death of the children. Neither died under four days of age, and some of them lived several days longer. They weighed from three to four pounds apiece. What a wonderful sight they would have been if they could have all lived.

I am indebted to Rev. D. S. Campbell for the data in this case. He lives in my town and is the brother of the mother of these babies. I have procured a picture of them, but it is so dim I could not get one for you.

W. W. LASLEY.

Lewisburg, Ky.

[An interesting report. Who can equal it?—ED.]

NOISELESS STREET CARS

Through the columns of your valuable and widely read publication, I should like to start a propaganda which, I believe, every American physician can conscientiously endorse and promulgate continuously, if he will but stop to consider the great, the almost inestimable, benefit to the nerves of Americans that will become apparent almost immediately after the adoption, by our traction companies, of the ideas herein suggested for the serious consideration of all concerned.

Once the great benefits that will accrue from the removal of dangerous and unsightly wires now so multitudinous in the busier portions of the larger municipalities having been established, I believe the insurance companies (fire and life) as well as all propagandists of civic inprovements, will hasten to lend their aid to our crusade for the much-to-be-desired substitution of the French auto-street-cars now in use in great numbers and rapidly becoming popular on the trackless thoroughfares of New York City.

I sincerely believe that such great benefits will accrue to the health of the populace of our larger cities, from the introduction of the rubber-tired auto-street-cars, and the abolishment of the car tracks and iron-wheeled street-cars and the dangerous and unsightly overhead wires, that, once the people grasp the certain possibilities to be derived for their health, they will readily hasten some form of compensatory legislation (such as charts of franchise for present unused streets to present street-car companies, for long terms and gratis), at the same time demanding changes to heavy pneumatic or to solid-rubber-tired wheels for their cars and to the installation of gasolin or electric motors for each separate car in service by those corporations.

I am fully aware of the magnitude of the proposition herein discussed or suggested for discussion; but, I firmly believe that, with the hearty concurrence of the thinking members of our profession all over America, it would not be long before every advocate of civic improvement would soon join our ranks, helping to obtain proper legal and speedy removal of all street-car tracks from our otherwise beautiful streets. Then, not long after this idea reaches them, the large fire-insurance companies will realize the great safety to them and their greater ease and certainty in fighting fires, in the absence of all

the multitudinous highly charged electric wires, especially in more densely populated districts. After this, our life insurance companies, and more especially the accident insurance companies, will quickly recognize the enormous gains to their respective treasuries if such innovation can be accomplished through so bloodless a revolution as only public opinion, properly regulated and guided by intelligent physicians, can accomplish.

Furthermore, I am firmly convinced that, once the great metropolitan dailies—which now so fervently advocate civic attractiveness—obtain a consensus of opinion from physicians, endorsing and heartily advocating the improvement here suggested, they too will hasten to join their powerful influence in this propaganda. Then, when our propagandists of civic attractiveness, who daily advocate public improvements of every kind (such as removal of billboards to appropriate places, systematic garbage removal, etc.), see that the medical profession has studied this particular question and rendered scientific judgment upon it, and for scientific reasons advocates abolishment of all unnecessary noises, and for esthetic as well as for scientific reasons advises the removal of present-day street-car tracks and the substitution therefor of auto-cars with rubber wheels—then, I say, as soon as a goodly number of our public speakers on civic attractiveness shall learn these facts, they too, I believe, will hasten to add their voices to assist physicians in their purely altruistic endeavors.

True, we doctors certainly will lose through the lack of nervous patients in consequence of the success of such a movement; but the real physician, now, as always, has in mind only the best interests of his patients and of humanity as a whole.

Submitting these reflections for the consideration of any colleagues of the healing art of whatever socalled "school," I close, hoping the seed may fall on fertile ground.

REGINALD B. LEACH.

Paris, Tex.

THE TREATMENT OF OPIUM AND ALCOHOL ADDICTION

I would like to make a few suggestions in regard to an article in the July CLINICAL MEDICINE, page 759, by Dr. William Tanner.

I do not regard hyoscine as a specific or antidote in treatment of opium and alcohol addicts, but I think it plays an important part, taken in connection with very thorough eliminative measures, as suggested by the editor. Without such measures, I should expect a great deal of suffering and delirium.

I have not been able to control my patients longer than three or four hours without some sedative, particularly in the earlier stages of treatment. I believe that, if Dr. Tanner will resort to smaller doses of hyoscine, giving it more often, his delirium cases will be reduced to a minimum.

I have not had to use stimulants in very many patients and have not regarded the diarrheas as very troublesome, as we should naturally expect all organs to overfunctionate for several days after the sudden withdrawal of such a drug.

We should treat each patient individually; be tactful, diplomatic, and resort to suggestion when necessary.

I withhold practically all food for the first twenty-four hours, and do not give any medicine whatever after the third day.

I do not follow with a "tonic," during convalescence, but keep my patients under observation until they are eating well, sleeping naturally, and are on their own resources.

I have not offered these suggestions through a spirit of criticism. J. H. GREGORY.

Milford, Ill.

[Another sedative which has been employed with excellent results in these cases is gelseminine. It is free from the manifest disadvantages of the hyoscine and should be given more general trial.—ED.]

HE MUST DIG

He wanted a job, and like every one else
He wanted a good one, you know;
Where his clothes would not soil and his hands would keep clean,
And the salary mustn't be low.
He asked for a pen, but they gave him a spade,
And he half turned away with a shrug,
But he altered his mind, and seizing the spade—he dug!

He worked with a will that is bound to succeed—
And the months and the years went along.
The way it was rough and the labor was hard,
But his heart he kept filled with a song.
Some jeered him and sneered at the task, but he plugged,
Their words never seemed to disturb him a bit—as he dug.

The day came at last when they called for the spade,
And gave him a pen in its place.
The joy of achievement was sweet to his taste,
And victory shone in his face,
We can't always get what we hope for at first—
Success cuts many queer jigs,
But one thing is sure—a man will succeed—if he digs.

[This poem—and it is a good one—was sent us by one of our traveling salesmen friends, Mr. J. C. Brown, of St. Louis. He makes no claim for authorship, but he likes it —and so do we.—Ed.]

A MAN OF RESOURCES

"It's mighty little throubles me,"
Says Pat, "whin the well runs dhry.
Doc says I have wather upon me chist,
A weepin' sinew upon me wrist,
And a cataract in me eye.
What mathers it thin if the rainfall is slack?
Since wake before lasht, I've a crick in me back."

F. L. Rose.

Jackson, Mich.

A COMPLETE PRACTITIONER

When eating and drinking enhance
Only further the patient's entreaties.
And you thus can see at a glance
That his wasting confirms diabetes,
Advise him what rules he must follow:
Fat only, or meat, he should swallow—
'Tis quite incontestible sweets are indigestible,
And starch makes the worst sort of comestible.

When eating and drinking occur
With frequency rather informal,
The patient who eats, as it were,
To satisfy something abnormal,
May sight of this rouse our suspicion
Without histologic addition—
One so gastronomical, gibbous and comical
Has a worm oft in his depth anatomical!

With each respiration a rasp,
The patient's sides fastened together,
The pulse going up at each gasp,
Every cough with a choke for its tether,
Of a stab in the side he's complaining
And collapse appears momently gaining—
Since days of Babylonia bloody-spit and aphonia
Have outlined the clinical picture of pneumonia!

A patient inclining to swoon,
Also seeming to you neurasthenic.
Hysterical as a buffoon,
With accesses quite catamenic,
In crying and screaming and laughing
Past usual word-paragraphing—
This stress periodic becomes episodic:
Apply sinusoidals or simply cathodic!

Some symptoms will make you keep tab—
Opinion forever is changing,
A mystery as of Queen Mab
For every new sign rearranging;
From pains of an old spondulitis:
Neuralgia, perhaps, or neuritis?
A dose of ignatia for osteomalacia—
This reminds you of medicine in the time of Hypatia!

The surgeon may find that his skill
Will fail in the face of an ulcer,
Try ever so hard as he will
It's healing declines to draw closer;
In the case of deep structures, supposing
The bone has become exostosing,
Or some endosmosis obscures diagnosis
The epiderm dies from a chronic cirrhosis!

Again, you may come on a case
Suggesting some kind of dementia,
Asymmetry plain on the face,
In action the vague of absentia;
Some people grow gloomy and frantic,
Some others more meek and romantic;
At first exegetical and later frenetical,
The speech at last sinks to a low alphabetical!

You know every myriad phase,
From joyous to weak melancholic,
That marks the ineffable craze
Distinct in the free alcoholic;
From the time he commences to flounder
And you set him down now as a rounder
From impulse and vanity to a pleasant insanity,
Till the final event is his loss of humanity!

A patient becoming more pale
Than right, with his glands growing lumpy;
If heavier, still rather frail
And mentally slower and grumpy;
Deviation distinctly asthenic—
In the region determined as splenic:
An oligocythemia, or, worse, a leukemia,
Or worse yet, you may have met a splenic anemia!

On inspection the case may present
A facies quite orange or brassy,
The patient himself has a scent,
And a taste somewhat greenish or grassy;
Perhaps he drinks too much hot toddy,
The Icterus covers his body—
And whether myelogenous or just hepatogenous,
You will have to admit it is frankly endogenous!

But ills are not always in point
For prescriptions that daze the concocter,
Nor osseous nodes out of joint
To puzzle the innocent doctor;
What signs or what sight astrolabe-y
Predict the adventuring baby?
In fashion obstetrical, native a-symmetrical—
Unless as a twin it be born diplometrical!

One symptom may often obtrude
The racking disturbance of migraine,
In some this depends upon food,
In others perhaps upon eye-strain;
As once all theatrics were Frohman,
And equally all roads were Roman,
So cardiac and dropsical we verge on the necropsical,
In concluding this epicritic epitome synopsical!

Thomas Horace Evans.

Freeport, N. Y.

DR. JAMES NEWTON MATHEWS

Yes, Mathews, mind as fresh as early dawn,
And breathing airs from wood or dewy lawn,
Imbibed of birds their dainty music whole,
And poesy burst spontaneous from his soul;
And all his life until he yields to death,
As bubbling upward, playful in his breath,
Aye, trickled forth as from a robin's tongue,
More luscious songs than many a poet sung;

And you can see, as you his words rehearse,
See, as you revel freely through his verse,
The gleam of genius dart among his lines
Like humming-birds amid the flowery vines.

Yes, sweet as if he feasted deep in dream
On ripe strawberries when acrush in cream;
Or dwelt among the bugles blown of blooms,
Whose dewy blossoms ope in odorous glooms,
He wove of poesy, amidst that pure regime,
A dainty, sugared, rare *créme de la créme.*
Here we would linger, tho' we seldom tire—
One loves to feast on music from his lyre,
And revel in, so near its raptures throng,
Quintessence, at the sacred heart of song,
Which clings about it like new Irish lace.
And ever clothes it with a charming grace.

RUFUS CHILDRESS.

Chicago, Ill.

—

[Mr. Childress, the writer of this tribute to the late Dr. Mathews, the Illinois poet, is one of the Abbott business household. He is the author of several books of poems, and has another one ("A Poet's Lance and Its Lurers") in preparation.—ED.]

MUSCA DELENDA EST

(The Board of Health has ordered the fly to be exterminated.)

The bugle call of Hygeia
Is sounding through the land,
Arousing all the people,
To form a swatting-band.

To swat the pesky fly at sight,
And smite him hip and thigh,
'Til not a single buzzer
Is left to make a cry.

Because he carries death-germs,
From many, many ills,
That poison food and people
And run up doctor's bills,

The pow'rs that be have said,
"Exterminate the fly";
And typhoid, with other ills,
Will bid the world good-by.

THOS. W. MUSGROVE.

Sultan, Wash.

ERGOT

I shall sing no song for hero bold—
No story of martyr shall tell—
Tune not my lyre's most resonant strings
In praise of some famous belle.

For those who revel in tales of deed
Of Gaul, and Roman, and Goth,
Here are scenes as brave and as fraught with death
Though spun in a different cloth.

And for those who find beauty in womankind,
In the glance of their luminous eyes,
There are moments when beauty, and all, is forgot
In the hurried last good-bys.

So I pipe a lay to a fungus growth,
Nor my lowly theme decry;
For the fame of my champion goes with its name—
It's the ergot on the rye.

And why do I sing of this humble thing,
Unlike the bards of old,
Nor catch a glint from armor fine,
Nor the flash of burnished go d?

Except for this smudgy smut on grain,
Full many a lady dear
Would be no more in the flush of life,
But lying asleep on her bier.

Disease would have laid its hold on men,
Their brightest hopes to sadden;
But from the ergot's beneficent powers
Came new health, their hearts to gladden.

For mothers have died in the years agone,
Died with their babies' first cries;
And brave men quailed to see them pale,
Helpless before their eyes.

But now when blood red flows from parturient bed,
Like fields o'er which cannons boom,
What is prized more high than the smut on rye,
That grasps the sluggish womb?

Or when in the throes of vital shock
The pulse runs like a thread,
The skin is cold, and damp, and pale,
The sick man nearly dead—

What then but ergot stems the tide
In half so swift a way,
And brings the sufferer, from the night of death,
Back to the life of day?

Or when delirium's fretful fever
With horror paints the mind,
'Tis ergot the soothing minister
That is to the brain most kind.

I do not praise the men of war
Who the soil with ichor lave;
But, instead, this sooty parasite
That human lives can save.

Let others hail the fighting man;
Let others bend the knee
To woman fair with beauty rare
Or to lords of high degree—

I shout acclaim to a boon of the race
For red man or fair Asturia
And 'mong monuments of earthly worth
'Pear one to claviceps purpurea.

G. MERRILL HAWKINS.

Seattle, Wash.

NEWS NOTES

AN ITEM in one of the daily papers tells us that four prominent New York surgeons were called upon to attend the ailments of a sick Chinese dog. At once to relieve our readers of suspense, we will add that by last accounts the dog was doing nicely.

—

DR. JOHN J. MULLOWNEY of the Boston Board of Health declares that soap is a carrier of virulent germs and a menace to health. He believes that no animal soap

should be used in washing food utensils, and that there is danger in the indiscriminate use of toilet soap in public places.

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THE September number of the *Proctologist,* published in St. Louis, will contain the papers and discussions presented at the last meeting of the American Proctological Society.

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THE twenty-sixth annual free clinic in orificial surgery will be held in Hering Medical College, Chicago, corner of Wood and York Streets, by Dr. E. H. Pratt, on September 24th, 25th and 26th. Write to Dr. Pratt, 32 N. State St., for particulars.

—

HERE are two good friends of ours who have recently been appointed first lieutenants in the medical reserve corps of the United States Army. One is Dr. W. E. Fitch, of New York City, editor of *Pediatrics;* and the other is Dr. Simon J. Young, of Valparaiso, Indiana, whose paper upon "Some Landmarks in Diagnosis" appeared in our June issue.

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BETWEEN January 1 and June 10, 1912, specimens of brain tissue from ninety-seven dogs were examined by the Chicago Department of health, and in sixty-five cases the dogs were found rabid. Eighty-two persons are known to have been bitten by dogs which have been examined and found to have the disease. The presence of the Negri bodies in the dog's brain tissue is now considered proof positive of rabies.

—

SOME unwise people of Detroit are trying to block the erection of a school building for tuberculous children where they can have the benefit of open-air instruction. This building is to be erected in a residence section of the city, near one of the city schools, and will owe its existence to the generosity of Mr. Frank B. Leland one of Detroit's prominent business men

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THE effort was made at the last meeting of The American Medical Association to create a new section on physical forces in medicine and surgery. Our good friend, Dr. Edward H. Egbert, of Washington, D. C., is taking a very active part in this movement, which of course has our hearty sympathy. We suggest that anyone interested should communicate directly with Dr. Egbert, at The Cairo, Washington, D. C.

—

A NOVEL bureau has been established in Missouri at its state university, at Columbia. This is a Bureau of Information in preventive medicine, and it will furnish free to the citizens of the state information concerning the cause and prevention of disease. It will cooperate with the health authorities of the state in efforts to prevent epidemics, and will make free pathological examinations at the laboratory of the university. It will be in charge of Dr. W. J. Calvert.

—

OUR friend, Daniel, of *The Texas Medical Journal,* has introduced several new features which make that ever interesting publication even more fascinating. Among these features are, A Woman's Department, edited by Mrs. Daniel, and a department of Eugenics. The "Red Back" has also been made the official organ of the State Society of Hygiene. Our congratulations to Dr. Daniel! Physicians in the southwest who are not familiar with his journal should write for a copy—or better still subscribe. It is published at Austin, Texas.

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PHILADELPHIA is making war against the fraudulent medical museums of that city. Eight men connected with these places have been arrested and charged with practising medicine without proper license, conspiracy to obtain money under false pretenses, and obtaining money under false pretenses. The places attacked are said to be part of a national syndicate of medical museums, rated at being worth something more than six million dollars. Two Chicago men are said to be at the head of this syndicate. According to the testimony, each of these establishments employ men who go by the names of "money getters," "doctor," "lecturer," "circulator," "jollier," and "sob artist." Naturally, the "doctor" receives the least salary.

—

THE Fifteenth International Congress on Hygiene and Demography is to be held in Washington in September 23–28, this being the first time the Congress has ever convened on American soil. Buildings are to be especially erected for this Congress in Potomac Park and it is expected that it will be the greatest public-health exhibition ever shown in America. In this exhibit there will be eleven groups, intended to show what America has done in the prevention of disease and the promotion of health. Dr. Joseph W. Schereschewsky, of the United States Public Health and Marine Hospital Service, will be in charge of the exhibition. Special interest is likely to be shown by foreign delegates in the demonstration of the sanitary working plans of the Panama Canal.

JUST AMONG FRIENDS

A DEPARTMENT OF GOOD MEDICINE AND GOOD CHEER FOR THE WAYFARING DOCTOR

Conducted by GEORGE F. BUTLER A. M., M. D.

UNLESS a doctor is a skilful therapeutist, he may do harm when treating a sick person.

Harm is done by not beginning treatment early enough and vigorously enough.

For instance, in the case of threatened gout or rheumatism, intestinal and renal elimination and the use of colchicine or salicylates should be begun at once and in such a way as to get rapid and active action. In malaria, quinine, and in syphilis, mercury should be given in sufficiently large doses to secure a pronounced effect as soon as possible.

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The failure of a necessary prescription may be due to skepticism, to negligence in getting all the information possible about the case, and to excessive diffidence. The art of the doctor is made up of confidence, prudence, and decision—qualities without which the physician, with all his medical learning, would be unequal to his task.

Many doctors do harm by giving a useless remedy, or too large doses of medicines or for too long a time. To overstimulate an organ or to subject a weak organ to big doses of a powerful drug, is to do that organ great harm. For instance, a weak, leaky heart may be rendered worse by giving too large doses of digitalin, or too often repeated, thereby exhausting the heart by overstimulation. Drugs that tend to accumulate in the system, like digitalin, moreover, must be given with great judgment.

Do not advise exciting measures for excitable patients or depressing measures for asthenic patients, or overfeed patients who have weak digestive organs, or bleed very depressed ones, or tap a moderate or scanty pleural effusion, and do not place too much dependence upon new and comparatively untried remedies.

—

There are many ways an ignorant, thoughtless or careless doctor may do harm. He may, for instance, give iron to a pale-faced constipated nervous woman without ascertaining the cause of the paleness. The paleness may be due to habitual contraction of the peripheral capillaries, or, again, it may be due to intestinal toxemia.

A doctor may give medicine for every anomaly presented by a patient. But many a time it is not a drug that a patient most needs. I have seen some hysterical neurasthenic women, for instance, who most of all needed—well, drugs were not what they wanted or needed.

Do not imagine that large doses of strong cardiac remedies of the digitalis group will help patients whose myocardiums are intoxicated or inflamed.

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The thoughtless or careless doctor would do an excitable consumptive with congestion and hemoptysis harm by sending him to a high altitude or to the sea-shore. This same kind of doctor might thoughtlessly advise a sea voyage or costly medicines for a poor patient who could not possibly follow the doctor's advice. In the latter case, it would be much better that the medical adviser concentrate the person's resources on the truly useful things; urge him, if necessary, to cut out excesses in alcoholic beverages and tobacco and teach him to eat correctly and economically. There might then be a fair surplus which could be devoted to the reestablishment of health.

It is a matter of no great difficulty to make it possible, by various combinations, for people of modest means to enjoy the same benefits as do the richest: active principles instead of bottles of expensive mixtures, which are not as palatable and in all probability not nearly as efficacious, suitable food-stuffs instead of reparative medicaments, and a hundred other little devices calculated exactly to adapt an efficient therapeutics to the patient's means.

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A physician should be careful not to give medicine when it exerts a deleterious influence upon the organs of reception, of passage or of elimination. Thus, one should be careful about administering creosote, mercurial preparations or iodine preparations to "dyspeptics"; also avoid prescribing laxatives containing aloin for those suffering from piles,

codliver oil for those suffering from diarrhea, the application of blisters to children, old people, and those suffering from Bright's disease, and so along the line.

Do not look for something new and novel when you know, by experience, that you have right at hand a good old remedy for the condition.

Where traditional medicine has shown the harmlessness and regularity of action of certain successful practices, it is unwise to try to do better by some novel or doubtful method.

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If a doctor has had a good medical training and then, after having devoted all his attention, all his conscience, intelligence and knowledge to a case, he makes a mistake, he is not culpable. Any doctor who has any considerable practice may make mistakes.

But if a doctor should incise a vein lengthwise for bleeding, should vaccinate by numerous and enormous incisions (where slight and short scarifications would be ample), or give hot baths to depressed patients, or institute intensive mercurial treatment for a patient afflicted with renal syphilis without regard to the action of this remedy upon the kidneys, or immobilize a fractured limb and in so doing place the fragments in a vicious position, or apply an ice-bag to the skin without the interposition of a flannel compress, or prescribe emenagogs to a cachectic woman in whom the menses have been arrested, or fail to recognize the necessity of asepsis in minor as well as in major surgery, or prescribe certain medicines when knowing but little about them or attributing to them an exaggerated potency, or misled by some previous fortunate coincidence mistaken for a rule, or irrigate too frequently a cavity which is in the process of cicatrization or is the seat of hemorrhages—if guilty of these acts of commission and omission, he would *not* be making a "mistake," but doing a downright fool thing and should be prosecuted for malpractice.

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I don't know but that negligence is about as bad, for when a man knows better and then neglects a patient, he is fully as guilty as the ignoramus who fails to do what is necessary because he does not know better. And who are they that, through negligence, inflict harm upon patients and their families? Here are a few:

The doctor who brings contagious disease from one family to another by neglecting to wear a special garment or to wash his hands; the doctor who, when giving an anesthetic, allows a patient to die or to come very near dying from the drug because he is watching the operation and not the patient also; and who permits bed-sores to occur and gives them no attention; who, in cases of typhoid fever, paraplegia or any of the infectious or nervous diseases, overlooks the proper evacuation of the bladder; who prescribes a certain dose of which he is not sure or who does not stop the administration of a medicine in due time; who irrigates the uterus with a liquid too hot or too caustic; who fails to control the service of the nurse; who does not insure the proper execution of his prescriptions or fails to assure himself of the quality of his medicines; or who is indifferent as to whether he administers reliable active principles or old, inert, unreliable galenicals, Many other examples of negligence could be enumerated.

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There are many doctors who have the habit of consulting a book of formulas as a basis for prescriptions. No compilor of ready-made formulas can foresee the complications, susceptibilities, and special indications in any given case, and one may do great harm to his patient by conforming to an otherwise very good formulary.

The books will tell you that the dose of digitalin, for instance, is from 1-10 to 1 grain. This dosage would be suitable for stimulating the heart, in a case of failing compensation in the course of cardiopathy. But to give 1 grain, or even half that amount in a case of cardiac asthenia resulting from typhoid fever, for instance, would mean to endanger the patient's life.

Even with such a mild drug as magnesium sulphate, the dose of which as given in the books is from 1-2 to 2 ounces might, if given in these doses to a patient in the third week of typhoid fever, kill him by producing an intestinal perforation. A dose of this salt that would be harmless in the beginning of typhoid fever might prove fatal in the third week of the same disease and for the same patient.

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In order not to do harm with medicines, it is necessary to take into account something more than the doses; namely, the patient, the disease at its stage of development, and the medicinal action, facts which no formulary can supply.

As a rule, small, divided doses are preferable. Your aim should be to avoid a poisonous action of your remedy, but to adjust it as accurately

as possible to the functional needs and resistance of the organs to be acted upon. This purpose can be accomplished best by using the active-principle granules.

However, there are some remedies that should not be given in divided doses, as for instance, most of the hypnotics; although there are certain conditions where even hypnotics should be given in divided doses. I have seen cases of insomnia, accompanied by great motor restlessness, where I got the best effect by giving 3 grains of sulphonal and 3 minims of fluid extract of conium every two hours for three doses, say, at 6 and 8 and 10 o'clock in the evening. Quinine in malaria and also cathartics as a rule are best not given in small, divided doses.

When giving an active remedy, some functional corrective should be combined with it under certain conditions, as for instance, in prescribing a hypnotic for an individual with a weak heart, it is well to add to it some cardiac stimulant like sparteine sulphate. There is less danger in giving acetanilid if it is combined with caffeine or sparteine.

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Before instituting a line of treatment for any patient, you should ask yourself the series of questions suggested by A. Manquat, of Paris, in his "Principles of Therapeutics," as follows:

With what dose am I sure not to exceed the limit of tolerance? Does this patient present any renal, hepatic, digestive, nervous or cardiac weakness liable to influence the action of the remedy or diminish his tolerance?

Can the patient do better by proper hygiene, good nursing, etc., without drugs; in other words, are the diagnosis and prognosis of a nature to warrant medicinal, or drug, intervention? Are the organs upon which the disturbances depend in a state of simple asthenia, or are they affected by an intoxication or an active lesion? How is the disturbed function to be corrected?

If this correction can be realized by means of a medicine, what is the useful action of this medicine? What are the organs and tissues upon which it will exert its selective action? What is the dose with which I can be sure to remain on the safe side of the limit of intolerance in a subject of medium resistance? Are the organs of the patient under consideration able to endure this same dose without intolerance? Will the medicine under consideration exert its action upon the same organs upon which the disease is acting?

Is there any way of securing the desirable effect by acting indirectly through one or several other sound organs? What is the posology to be adopted—not to avoid a poisonous action, but to adjust it as accurately as possible to the functional needs and resistance of the organs to be acted upon?

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Is it necessary to overcome or to suppress any symptom? Is there no serious inconvenience in so doing? Can the desirable result be obtained without medicine? If a medicine must be resorted to, what are the adjuncts whose employment will enable me to use as small a dose as possible of the symptom atic remedy? Will the symptom reappear after the medicinal action is exhausted? In that case, will there be no inconvenience in renewing the impression of the medicine?

Is the state of the patient's organs and their functional activity noted with sufficient accuracy and completeness to enable me to recognize and follow the modifications produced by the medicine, in order to contine, reinforce, or suppress the medicine according to the effect observed? How will the heart, the nervous system, the kidneys, the liver, the digestive organs behave after the patient has received the medicines? Is there any fear of intolerance or accumulation because of insufficiency in organs of elimination? How are the first signs of intolerance to be recognized?

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Is the alimenation sufficient to bring about the desired improvement? If not, what dose of the medicine under consideration is most likely to be assimilated; that is, without inflicting upon the organs of elimination the task of rejecting the unutilized portion? Would this medicine be liable to give rise to trouble in the organs of reception?

If I am obliged to prescribe a medicine which presents some disadvantage, is there any way to correct or attenuate it? In particular, is there any reason for alternating or dividing the doses or adding some functional corrective?

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In order not to do harm, the physician must have science, conscience, and art combined. Should there be incompleteness, conscience is preferable to science, since conscience leads to science, while the converse is not so certain.

In case of doubt, a conscientious physician will carefully take every measure to avoid a harmful action. It will, gradually, become a habit with him to ask himself certain questions whenever he comes face to face with dangerous situations. The questions that must ever be kept in mind are concerning the indications, the dosage, the contraindications, tolerance , and material errors.

AMONG the BOOKS

THE PRICE OF CABOT'S "DIFFERENTIAL DIAGNOSIS"

In his announcement of Cabot's "Differential Diagnosis" (CLINICAL MEDICINE, August, page 871), the reviewer gave the price of the book erroneously as $3.00. It should have been $5.50. The reviewer regrets that this mistake happened, and desires to make this correction.

REESE'S "MEDICAL JURISPRUDENCE"

Textbook of Medical Jurisprudence and Toxicology. By John J. Reese, M. D. Eighth Edition. Revised by D. J. McCarthy, A. B., M. D. Philadelphia: P. Blakiston's Son & Co. 1911. Price $3.00.

The subject of the law in relation to the practice of medicine, and the allied subject of toxicology are very important, and the practitioner should have at least a working knowledge of both, or else have at hand the means of obtaining the information. Reese's "Medical Jurisprudence" has been a favorite guide for many years, and the new edition, which has been brought to date by paragraphs on anaphylaxis and some recent information on toxicology, is certain of being welcomed by many physicians who desire a handy and concise manual rather than a cumbersome system.

MUMFORD'S "SURGERY"

The Practice of Surgery. By James Gregory Mumford, M. D. With 682 illustrations. Philadelphia: W. B. Saunders Company. 1910. Price $7.00.

The author disclaims any intention of writing a treatise on general surgery, or, rather, on the theory and practice of surgery. With the immense progress of the last years and the far-reaching specialization in the field of surgery, as of all medical endeavor, the mastering of the whole subject by any one individual has become an impossibility. He therefore limits himself to presenting to the reader an account of the practice of surgery—of surgery as he will see it at the bedside, in the accident-ward, and in the operating room.

The work rather gains by the somewhat novel treatment of the subject-matter, in that the author has taken up surgical diseases in their order of interest, importance, and frequency; that is, so far as possible. This enables the student the more easily to find and study those conditions which he is most apt to have to deal with, while the rare surgical diseases, which he may never see, very properly occupy a less important position.

PRINGLE'S "FRACTURES"

Fractures and Their Treatment. By J. Hogarth Pringle, M. B., F. R. C. S. London: Oxford Medical Publications. 1910. Price $5.50.

This book is excellently written and well gotten up, and will prove of interest to the surgeon, as also to the general practitioner who is called upon to treat fractures.

MASSEY'S "IONIC SURGERY"

Ionic Surgery in the Treatment of Cancer. With a Chapter on Ionization in Surgical Tuberculosis and in Hemorrhoids. By G. Betton Massey, M. D., New York, The A. L. Chatterton Company. 1910. Price $3.00.

This is an entirely new work by the author, giving the fullest and latest technic of his method of destructive sterilization of cancerous growths by the massive cataphoric dispersion of the ions of zinc and mercury. A large number of case histories are related in detail, with the exact procedures employed in each and the results to date, and the apparatus and electrodes used are described and illustrated.

ELY'S "JOINT TUBERCULOSIS"

Joint Tuberculosis. By Leonard W. Ely, M. D. New York: William Wood & Co. 1911. Price $2.50.

This volume shows clear evidences of painstaking study and investigation and of

a large personal experience. The author has succeeded in communicating the results of his observation in a form that must appeal to us, and his pathological descriptions and discussions are certain to aid the surgeon much in the recognition and treatment of the difficult conditions presented by tuberculous joint affections. Concerning the question of operative, respectively conservative, treatment, the author is epigrammatic: "When those who practise invariably radical treatment become more conservative, the conservatives may become more radical."

The book is well printed and beautifully illustrated.

THE PRESCRIBER

The Prescriber. A monthly journal dealing with therapeutics, pharmacology, and the newer remedies. Edited by Thos. Stephenson, F. R. S. E., F. C. S. Volume V, January to December, 1911. Edinburg. Price 5s annually.

The fifth complete volume of this excellent little journal has just been received, nicely bound in red cloth. It is a convenient book of reference for the therapeutic and pharmacologic progress of the past year. As we had occasion to say last year (CLINICAL MEDICINE, 1911, p. 806), *The Prescriber* is a journal decidedly worth having. It is full of good, up-to-date information, which is presented in concise and readable form, yet complete enough to be useful without having to turn to the original articles for particulars. We want to encourage our readers to subscribe to this unique publication, the low price of which is remarkable.

SADLER'S "PHYSIOLOGY OF FAITH AND FEAR"

The Physiology of Faith and Fear. By William S. Sadler, M. D., Professor of Physiologic Therapeutics. Chicago: A. C. McClurg & Co. 1912. Price, cloth, $1.50 net.

To those familiar with Sadler's "Science of Living" this new product of his fine erudition and graceful diction will be welcome. To him the present-time recrudescence of psychotherapy is a natural reaction against the scientific materialism of the preceding century. Recognizing the influence of mental states on the bodily functions, the people crave information, and this has been misapplied by crude, crass, and commercial junk, intermingled with alleged religious cults and graft.

Dr. Sadler seeks to separate mental healing from sect and greed and to study it from the standpoint of the physiologist-physician. In so far as the occult may be bared, the irrational reduced to reason, the imaginative assumptions of the explorer beyond the bounds of the real brought under the surveyor's chain and properly mapped, he succeeds. But as long as the fancy of man can devise airy trifles, like the phantasmagoria of the tale-teller of Bagdad and coagulate them into a creed that he calls men to subscribe to as eternal truths, so long must the efforts of the plodding truth-seeker fall short.

Dr. Sadler has collected many interesting facts regarding the innumerable exemplifications of human credulity and folly, people who should have more sense than to entrust their lives to fakers and submit to be hoodwinked by the most glaring deceptions. The book presents much useful material to him who needs to fight these frauds.

WM. F. WAUGH.

SMITH'S "WHAT TO EAT"

What to Eat and Why. By G. Carroll Smith, M. D. Boston and Philadelphia: W. B. Saunders Company. 1911. Price $2.50.

This is one of the most practical books on dietetics that has come to our attention. In its three hundred pages is contained a lot of information that every medical practitioner ought to have and which he can use to good advantage every day.

Very few practitioners are as well informed as they ought to be on the subject of dietetics. In fact, the general opinion, in the past, has been that little or nothing need be known in this direction. But, as time passes, we are becoming more and more convinced that foods must be reckoned with; that they ought to be carefully considered in outlining a treatment for any case. The abuse of appetite and indiscreet selection of the foods that make up the daily diet lead to many mal-conditions, in which, if they are to be treated successfully, the dietary must be carefully censored, omitting those things which are contraindicated and prescribing such articles of diet as may be partaken of with advantage.

This paragraph from the preface explains the aims of the author: "The desire is to place before the medical student, and particularly the active, busy practitioner, a book describing the fundamental elements of food and the principles underlying its use,

the essential reasons why a change of the diet is desirable, and how this change may be made in the most practical, time-saving way, that there may no longer be an excuse, except in rare instances, for a country physician sending his patient to the city specialist to be dieted after an accurate diagnosis has been made. Only a few diet lists have been given, but each one is sufficiently comprehensive to cover the many different phases of the same disease."

HAMILTON'S "MARRIAGE AS A TRADE"

Marriage as a Trade. By Cicely Hamilton. New York: Moffat, Yard & Co. 1909.

The author has filled 257 book-pages in order to say that marriage is, by tradition and custom, almost the only trade open to women; that marriage, therefore, is a compulsory institution, and that it is the only trade in which the workers are occupied in sweated labor without remuneration; that, further, this condition of affairs is artificial and forced, and is due to the unwillingness of man to consider woman as his equal in any way. The reviewer can not find that the author gives any remedy, and cannot but think that she might have made her argument just as well and less cumbrously in the space of fifty pages, or less.

DELAFIELD AND PRUDDEN'S "PATHOLOGY"

A Textbook on Pathology; with a final section on postmortem examinations and the methods of preserving and examining diseased tissues. By Francis Delafield, M. D., LL. D., and T. Mitchell Prudden, M. D., LL. D. Ninth edition. New York: William Wood & Co., 1911. Price $5.50.

Delafield and Prudden's Pathology has long been before the profession and is generally acknlowledged as a standard textbook. The present, ninth, edition has been largely rewritten and revised, so that it is, in many respects, a new book, the more so, as the senior author, Dr. Delafield, no longer shared in its preparation. The resulting work is thoroughly to date in its contents.

GRANCHER'S "RADIOGRAPHIC ATLAS"

A Radiographic Atlas of the Pathologic Changes of Bones and Joints. By Amédée Grancher (Paris, France). New York: The A. L. Chatterton Company. 1911. Price $6.00.

This beautiful volume contains an excellent collection of radiographs of normal and pathologic bones and joints which are sure to prove of material assistance in the interpretation of radiographic findings. As the author says truly, the Roentgen-ray is no longer employed merely to locate foreign bodies and to diagnose fractures. It also enables us to diagnose and control the treatment of other pathologic processes in bones and joints. The book is well gotten up and the plates are beautiful.

DOCK AND BASS'S "HOOKWORM DISEASE"

Hookworm-Disease: Etiology, Pathology, Diagnosis, Prognosis, Prophylaxis, and Treatment. By George Dock, A. M., M. D., and Charles C. Bass. Illustrated with 49 special engravings and colored plates. St. Louis: C. V. Mosby Company. 1910. Price $2.50.

The subject of hookworm-disease has assumed such an immense importance, especially in southern states, that the present treatise by two physicians who have studied the problem carefully meets a decided want. Our southern readers will be sure to find in it much that is of service to them in the treatment of this baneful malady.

CORNELL'S "INSPECTION OF SCHOOL CHILDREN"

Health and Medical Inspection of School Children. By Walter S. Cornell, M. D. Illustrated with 200 halftones and line engravings, many of them original. Philadelphia: F. A. Davis Company. 1912. Price $3.00.

The author of this work is director of medical inspection of public schools in Philadelphia, and in this effort he presents a practical exposition of the work of medical inspection, born of the examination of some 35,000 children. The subject-matter discussed is rich, and includes a complete survey of medical practice as it relates to children of school-age. The fact that the hygienic problems of childhood have received generous consideration render it all the more valuable.

The book will primarily be important for physicians entrusted with the medical inspection of schools; but to the pediatrist and the general practitioner also it affords much information for which, without it, he would have to search laboriously in textbooks and scattered journals. It is a splendid work.

CONDENSED QUERIES ANSWERED

PLEASE NOTE

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report their results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.

QUERIES

QUERY 5839.—"Sex Literature." C. W. D., North Carolina, writes: "I want to learn the name of the best book on sex matters, just the book to put into the hands of a boy sixteen years old who has no bad habits yet. I want to scare him, so that he may escape trouble."

E. B. Lowry's "Truth Talks With a Boy Concerning Himself" will meet your requirements, we think. Personally, we should hesitate to place any other book dealing with sex-subjects into the hands of a 16-year-old boy, unless we had paved the way and were prepared to light him on his journey with common-sense, heart-to-heart talks. The average youth either already has formed his conception of such matters (which usually are wrong), or he knows nothing whatever of what is worth knowing, and, then, as a result, reads in the wrong spirit or gets distorted ideas.

Lowry's little book, we believe, is a safe and most helpful publication of its kind; still, if the boy is capable of properly digesting "stronger meat," he may be supplied advantageously with such books as Malchow's or Lydston's on sexual matters. If you are not familiar with these volumes, you should get them.

Another splendid book upon this subject, intended especially for boys, though more particularly for those somewhat younger, is Dr. George F. Butler's "Every-Boy's Book." In this volume Dr. Butler handles the subject in a most delicate yet straightforward way. Its special interest is for the youth ten to fourteen years of age. This volume should be placed in the hands of every boy old enough to read, and every parent should read it also. There is a similar volume for girls, "Every-Girl's Book," also written by Dr. Butler. The price of each is $1.00, and they are published by The Abbott Press, Ravenswood, Chicago.

You say that you want to "scare your young man away from bad habits." Pardon us, doctor, if we suggest that that would be a most unwise proceeding. You can not "scare" him! The only rational procedure is to direct a perfectly natural instinct along natural and decent channels. Half the girls who go astray do so through ignorance, and half the young men who lead them astray are not natural libertines or morally depraved, but simply young, healthy, selfish, and ignorant animals. Were they properly instructed, they would realize that it is the first duty of the normal healthy male to protect the female even against herself; and, furthermore, they would be aware that the strong man—the man who is going to conquer through life—must first learn to subdue his desires when yielding to them is likely to prove injurious to himself or others.

It is fearful to contemplate the irretrievable injury which is wrought by a few mo-m ents of foolishness, or, rather, ignorant yielding, to a natural instinct on the part of two otherwise perfectly normal and rational young people. It is true that the sexual sense is more developed in some than in others and that where one could journey with perfect security, another would fall into the pit.

We, as physicians, know that the weaknesses of the parents in this direction are transmitted to the children, and a strongly sexual father or mother must not be surprised if they find that their sons and daughters at puberty stray along forbidden paths, they knowing, as they do, their own tendencies. Such parents should take especial pains to warn and guide their children through this particularly difficult period. It has been the writer's experience that more indiscretion occurs between the ages of fourteen and seventeen than at any other period of life that is, in the average "decent" human being

We are not now considering those who are naturally inclined to go wrong or the male or female libertine.

We should not attempt, therefore, to "scare" the boy, but rather impress upon the mind the fact that, if he desires to be a man worthy of holding his head high among other men and good women, he must be as pure himself as he would desire the mother of his children to be. To the writer it seems that one-half the scandals and "family skeletons" that so shock us at the present time would have been avoided and the many ruined lives saved had the parents of the principals been awake to their very obvious duties.

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Query 5840.—"Localized Peritonitis Following Abortion." L. R. T., Michigan, requests suggestions in an interesting case which he describes. The patient, about 25 years old, was first seen on June 20, after an attempt by her husband to induce an abortion by means of a catheter. They had been married about three weeks and she was pregnant four months. Her previous health was good, but she had been troubled more or less with constipation.

"I found her in labor," writes our correspondent, "with pains almost constant and extremely severe, the os, however, being entirely undilated. Two injections of hyoscine-morphine-cactin, half-strength, were required to secure relief; after which she went to sleep. The fetus was born as soon as she awoke, about two hours later; the placenta coming away without difficulty. Fearing infection, I packed the uterus with gauze soaked in 50-percent alcohol. The patient was feeling fine when I left.

"About five hours after the birth I was called again and found the patient restless and with a temperature of about 103° F. The lochia were normal, but there was tenderness over the intestines, especially over the appendix. I ordered a soap-suds enema, and gave her 4 grains of calomel. Next morning the tenderness was nearly gone, but there was but little discharge after the enema and no result from the calomel. The patient felt fine, was bright and cheerful, and looked well except for a temperature of 100° F. This elevated temperature occurred several times, for an hour or two at a time, throughout the disease. I removed the packing from the uterus, and repacked. No bad odor or sign of infection or any trouble with the uterus were observed after the temperature rose again to about 103° F. in the afternoon.

"I gave 4 grains of calomel in the morning, and 1-8 grain elaterium every hour for about five doses; also an enema morning and afternoon—1 1-2 quarts being about all she could retain. There was slight return from the enemas. I gave the intestinal antiseptic, 5 grains, every two hours.

Next morning her temperature was about 100° F:, and rose to 105° F. in the afternoon, gradually receding to 101° F. at 2 a. m. I gave an enema morning, afternoon, and evening. I gave physostigmine, 1-1000 grain, every half hour. Still there was not much result from the enemas. In the afternoon I gave physostigmine salicylate, 12-1000 grain, every hour for about five doses.

Next day the bowels had not moved except with the aid of enemas, but even these scarcely had any effect. The passages were dark-gray and offensive. Some membrane, probably intestinal epithelium, passed. I got the bowels seemingly emptied by July 2.

The temperature continued to range from 101° to 105° F. until July 4. On July 3 and 4 the patient was very nervous, almost hysterical at times, and intensely longed for her former home; so, on the 4th of July, I advised her removal to the parental home about ten miles away. The trip was made in an automobile, and no ill effects from the trip appeared. I have not seen patient since that day.

About July 7 a stomach and intestinal specialist from Detroit pronounced the trouble suppurative cholecystitis, and a surgeon was called. The latter, however, disagreed with the diagnosis, and blood and physical examinations showed no sign of suppuration. There has never been any pain or tenderness anywhere since that felt in the uterus and intestines disappeared after the first two or three days, except for an occasional headache. Blood tests for typhoid fever were negative. Large doses of quinine had no effect, thus excluding malaria.

At the time the surgeon was called all efforts to keep the temperature below 106 degrees were fruitless. The next day, in the forenoon, the temperature was 96 degrees, and in the afternoon she was decidedly better. Her bowels have been acting pretty well since I first got them cleaned out. At present her temperature ranges from about 100° to 102° F.

At first I believed that the liver was responsible for the whole trouble, but I am inclined to think there probably is a strong hysterical element, for which the abortion and her anxiety to conceal it may be responsible."

In true cholecystitis, doctor, you will find tenderness over the gall-bladder, above the level of the navel. The tumor, itself, usually is easily detected. Jaundice often is present. We doubt the existence of this condition in your patient, but much more probably it is a localized peritonitis. In fact, the whole symptomatology tends in this direction. Pain and tenderness limited, constipation, nervous break-down. Do not forget the possibility of a perforation of the vaginal vault or uterine wall by the catheter in the hands of the inexpert husband. At the present time a pus-sac or an encapsulated abscess probably exists.

There do not seem to be any typical signs of appendicitis, and had the woman suffered from *acute diffuse* peritonitis, death probably would have occurred ere this. Of course, we must think of "hysterical peritonitis," so-called. This neurosis sometimes is one of the features of mucous colitis. The condition may simulate true peritonitis in its onset, with severe abdominal pain, tenderness, meteorism, frequent micturition, evidences of collapse, and so on. It is said by some observers that fever may also be present. If evidences of mucous colitis and the characteristic hysterical symptoms are associated therewith, the diagnosis is clear. It is our experience that fever usually is absent in these cases, while the local signs are highly exaggerated in comparison with the general condition. Final recovery almost always occurs, although recurrences may take place.

Mucous colitis (membranous enteritis) is often considered a neurotic manifestation, the great majority of cases occurring in women between thirty and forty years of age. Here the pain begins lightly and is referred to the lower abdomen, it increases in severity until it reaches its acme, and, as a rule, is relieved entirely by the passage of membranous tissue. The temperature, however, nearly always is normal or subnormal. Diarrhea frequently is a feature, although constipation is not uncommonly observed. The amount of membrane excreted varies, and it may appear in the form of shreds, ribbons, like cord, or even perfect casts of the intestine may be voided.

We do not like the persistent temperature in this case, and believe another very careful blood examination should be made. The urine also should be tested. Is there any discharge from the uterus, is that organ normal in every respect, or is it "boggy" and displaced? Examine the lower bowel; mention the areas of hepatic dulness, the condition of the tongue, and other facts, if at present it should be possible for you to secure these data.

Naturally, we cannot make any definite therapeutic suggestions at this time, although we are inclined to suggest pushing echinacea, calcium sulphide, and nuclein, besides ordering inunctions of unguentum Crédé. High enemata of a solution of calendula and hydrastis ought to prove useful if the intestines are involved. The main thing, however, is to get a clear idea of the basal pathology.

The husband should be taught a lesson. The mere fact that he may have a chronic invalid wife on his hands may be thought by some sufficient punishment, but any man who will undertake to perform abortion, especially upon a woman he intends to marry or has married, needs drastic treatment.

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Query 5841.—"Nephritic Retinitis." A. L. S., Oklahoma, is treating a boy 3 1-2 years old who had what was diagnosed as typhoid fever, and had all appearances of dropsy. Feet, hands, and abdomen were affected, and his face was swollen so that he hardly could see. He became well, but the swelling comes and goes. However, he is totally blind. His eyes are not hazy or red; not painful. He looks as natural as ever. Our correspondent asks what may cause the blindness and what can be done for him.

Evidently, a very serious condition obtains, and treatment, to be effective, must be based upon a much clearer understanding of the underlying pathology. Just how did the blindness develop? Was loss of sight gradual or sudden? Has the urine been examined?

It is quite certain that you have to deal with a nephritis. As you are aware, serious diseases of the eyes often follow typhoid fever. In this case, however, there is every reason to regard the kidneys as the seat of the disease, the blindness evidently being due to nephritic retinitis. In such cases cyclic edema frequently is observed.

We would suggest that you collect the urine voided in twenty-four hours and send a 4-ounce specimen to our pathologist for examination. At the same time make a very careful physical examination and report your findings. Note, especially, heart-sounds, pulse-rate, patellar and ocular reflexes, and so on. In these cases, death usually closes the scene within two years; not infrequently, the child dies six months after blindness sets in. We are fearful that the prognosis in this particular instance is gloomy.

QUERY 5842.—"Flour Ball for Infants." F. O. P., Iowa, has been told about the "English flour ball" recommended by Candler in his "Everyday Diseases of Children," and he desires to be informed as to the way of making the ball and prepared food and the amount of latter used at different ages.

To prepare the flour ball, take from 2 to 5 pounds of finest hard-wheat flour. Tie tightly in a cloth as you would a plum pudding. Drop into a large pot of hard-boiling water, and maintain at a full boil for at least four hours. At the end of that time, lift out the sack, hang it up to drain for fifteen or twenty minutes, open up the cloth, and remove the thin paste on the exterior of the flour ball as you would the peel from an orange. Place the ball in a dry, cool place, and grate each day the amount of flour necessary for the child's feedings. As you understand, the amount of cereal must be varied to suit individual conditions.

The flour is stirred into a thin cream with a little cold water, then the amount of water necessary for the day's feeding is added, together with a little salt, and the whole is boiled for three minutes. The milk is now added, and the fluid once more allowed to come *almost* to the boiling point, but *do not let it boil*. Strain into a sealer or the number of bottles that will be used, after adding the requisite proportion of sugar of milk.

Obviously, it is impossible to outline any fixed scheme of feeding, for one child will demand richer food at three months than another could tolerate at nine. You will find an excellent table of percentages and general instructions for rational feeding of infants on pages 15, 16, 17, *et seq.* in Candler's "Everyday Diseases of Children." You should own this extremely useful book. (Price $1.00.) Doctor Spach's "Infant Feeding" is also a most practical volume.

The "flour-ball," when properly made and used, is perhaps the most satisfactory cereal food for children available. It is not costly, does not spoil, and can be used in just the proper proportions.

—

QUERY 5843.—"Subacute Specific Urethritis." F. L. W., Virginia, has under treatment a man of 38, whose general health is good, who is a steady drinker, and never has had any venereal disease. On April 19 he had sexual intercourse with a public woman, and did not notice anything wrong until May 17. Then he felt a slight burning on urinating; on the 18th there was a discharge, more like mucus than anything else; on the 20th the discharge became purulent, and so remains—but is very light, only a few drops a day. At present there is no burning on passing water, and the only other symptom is the discharge. The diagnosis is "simple urethritis," but the patient is worried and wants a microscopical examination made (slide accompanying).

The report of our pathologist shows a moderate quantity of pus-cells, a few gonococci, and some staphylococci. It is evident that the patient suffers from chronic or subacute gonorrhea. The drainage treatment, if properly carried out, proves efficacious in 95 percent of the cases, and is being used now by scores of genitourinary specialists daily. In fact, practicians who avoided such cases, since becoming familiar with the method, have specialized along this line with very gratifying results.

Secure the patient's urine by the three-glass method, taken upon arising, and have it examined. It is essential to discover the extent of the infection.

What line of treatment has been instituted so far? Have astringents been used? As you are aware, some of these subacute cases are very difficult to handle, and it is necessary to proceed cautiously. Infection of the lacuna magna or sinus pocularis must be recognized, if present, and the area be treated directly.

We should be inclined, in this particular case, to place the patient upon the antiblennorrhagic combination (calcium sulphide, monobromated camphor, cubebin and piperine), using formin and arbutin as alternants. Flush the urethra three times daily with a weak carbolized solution of epsom salt (epsom salt 1 oz.; water 1 quart, carbolic acid, 10 minims). Then inject a fresh suspension of galactenzyme, two tablets crushed and stirred in an ounce of sterile water or thin mucilage of acacia. Use the epsom-salt solution freely. Do not inject the galactenzyme until the canal has been thoroughly cleared of the first solution.

If this treatment does not avail, institute the medication outlined in the literature, or give us a clearer idea of conditions, and we will prescribe definitely. Have the patient drink freely of barley water, made according to the following formula:

Barley water from flour: Take 2 tablespoonfuls of Johnson's (American) barley flour, or Robinson's English product, and stir in enough cold water to make a thin cream. Add 3 pints of boiling water, cook five minutes, stirring constantly, strain, and flavor with

lemon and sugar to taste. In our hands the American product has proven fully equal, if not superior, to the English product.

Barley water from pearl-barley. Take 2 tablespoonfuls of barley and let soak for a few hours or over night in water. Throw away the water. Boil the barley continuously for six hours, keeping the quantity up to a quart by adding water. Strain through coarse boiled muslin, and put in an ice-chest or cool place.

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Query 5844.—"Eczema or Dry Dermatitis?" A. F. R., Ohio, has under treatment a case of eczema involving the navel to about the size of a half-dollar piece. In 1901, when the patient and two fellow workers were shoveling hops from a bin, after the beer had been brewed, all three were stripped to the waist and each one noticed a redness involving the skin about the navel. The next day they applied phenol ointment. Two recovered and have shown no recurrence, but in the third it has persisted up to present time.

The patient has been treated by all the best dermatologists in the city, without any permanent success; all salves aggravate the condition, liquid applications keep it under control. He has no other blemish on his body and is always in the best of health.

Are you quite sure, doctor, that you have to deal with a true eczema? Before prescribing, we should like to have a much clearer idea of the character of the lesion. It is altogether probable that a thorough cleansing of the area with carbenzol soap and the application of thuja or of thymol iodide, or even iodoform-collodion would prove curative.

Eczema, itself, is a protean disease, and in practically every case the underlying disorder of the body-chemistry requires correction. If this lesion has remained *in statu quo* since 1901, we can hardly believe it to be eczematous.

We are inclined to think this is a drug dermatitis, i. e., lupulin poisoning. One of the most effective treatments for true eczema umbilicæ is outlined herewith.

If there are fissures, wash thoroughly with boric-acid solution, then dry, and touch gently with a saturated solution of silver nitrate in spiris of nitrous ether. Repeat, if necessary, in twenty-four hours, then paint the parts with compound tincture of benzoin or benzoinated collodion. Iodoform collodion, as already pointed out, works equally well.

We should be inclined to give a sulphur-bearing laxative, with alnuoid and irisoid internally in rather full doses.

Query 5845.—"Albuminuria" J. F. F., Ohio, requests us to give treatment, diet, and other management for a patient whose urine shows some albumin. The patient is a widow of fifty, with three grown children, and has never been sick in her life except at childbirth. She passed through the menopause without any unusual symptoms, although working under great nerve strain eight to ten hours daily and carrying great responsibility. She is happy and cheerful, and not worried about herself. Her work requires more or less of a constant pull on the left side, as she is leaning to the right for hours at a time. The doctor wants to know whether this pressure could affect the circulation sufficiently to cause irritation of the kidney?

The causes for the appearance, in the urine, of small amounts of albumin are varied and numerous, and so it is that in every instance the real underlying condition for this phenomenon must be sought and corrected. Let us go a little into details.

Albumin may be found in the urine in any one of the following conditions, viz.: congestion of the kidneys, in its various forms; all forms of nephritis; suppurative conditions; degeneration and neoplasms of the kidneys, ureters, bladder or urethra; acute infectious diseases; disorders of the blood, as in pregnancy, pernicious anemia, leukemia, scorbutus, purpura, poisoning by lead, mercury or syphilis; certain abnormal states of the nervous system, such as apoplexy, cerebral concussion, tetanus, epilepsy, meningitis, cephalic injuries.

You must also bear in mind that there is a functional, or physiologic, albuminuria, which is observed in certain persons in health after violent exertion, cold bathing, severe emotion, or overeating, especially of nitrogenous food.

Perhaps the principal source of urinary albumin is nephritis, and it can best be combated with the iodides. Potassium iodide has been highly recommended, but we have found albumin to disappear speedily under arbutin and calx iodata.

The foregoing considerations will enable us to see how impossible it is to outline a treatment for "albuminuria," as such. The success of the positive therapeutist is due to the fact that he diagnoses closely, and then treats the underlying conditions of the body-chemistry, and not "named diseases."

In albuminuria of nephritic or congestive origin, the following articles of diet should be forbidden: Ices, pastry, sweet foods generally,

new bread, beef tea, meat essences, jellies, highly spiced foods, pickles, sauces, rich foods (such as hare, duck, goose), cheese.

The following articles may be taken in moderation: Potatoes, peas, beans, bacon, eggs, red wine freely diluted with water.

The following articles may be permitted: Soups thickened with arrow root, vermicelli, rice or barley, fish, fowl, pigeon, game, lamb, tripe, sweetbread, calf's head, cow-heel, butter, cream, green vegetables, celery, onions, salads, mushrooms, artichokes, cauliflower, turnips, milk (plain or peptonized), skim-milk, whey, kumiss, farinaceous foods (such as stale bread, toast, rice, tapioca, sago, vermicelli, arrowroot, macaroni), tea, cacao, coffee, soda-water, seltzer and vichy waters.

If you will give us a clear idea of the clinical condition in this case and will forward to the laboratory a specimen of urine (4 ounces taken from the entire 24-hour quantity, stating total amount), it will give us pleasure to suggest therapeutic procedures.

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Query 5846.—"Vitiligo." J. R. B., Tennessee, desires some advice concerning the following case: "Girl, aged 13 years. Has always been healthy and never had any of the diseases peculiar to childhood. About one year ago she first noticed a white spot about the size of dime on the left side of her neck and one on the deltoid muscle. Others followed, and they have increased in size until they are about the size of a silver-dollar. She has one on the point of the chin and on the left cheek. She is perfectly normal in every respect and complains of nothing, eats heartily, and stools are regular. What is the cause of this loss of pigmentation and the treatment?

This seems to be a case of vitiligo. It is unfortunate that a cure for this disorder has not yet been discovered. Staining applications of iodine and silver nitrate are worse than nothing at all. Perhaps the expressed juice of green walnut-shells would prove the most satisfactory staining agent; unfortunately, it is not always possible to obtain it.

Hypodermic injections of pilocarpine and the internal exhibition of the arsenates in full doses often have been recommended. Exfoliation of the affected skin may be secured by the application, for four or five nights in succession, of pure oil of turpentine on retiring.

As you are aware, the typical lesions of leukoderma, or vitiligo, appear most frequently on the face, back of hands, and the trunk. They tend to enlarge slowly, while, as a rule, the neighboring skin shows an excess of pigment. The spots usually are round or oval, but new areas may form from time to time and coalesce and large white areas with irregular borders thus be formed. These areas frequently remain stationary for years, and in very rare instances retrogress, being, in the majority of cases, progressive.

The cause of vitiligo is unknown. It rarely appears before the tenth and never after the thirtieth year. It undoubtedly is a neurosis, hence, observed most frequently in neurotic individuals.

Savill (*British Journal of Dermatology*) recommends applications of pure phenol, painted over the affected area and allowed to remain for a minute or two, when it is neutralized with alcohol. The writer would be inclined to use the high-frequency current, vacuum electrode or the negative electrode of the galvanic battery with the current of two to five milliamperes. Contact should not be made for more than two minutes, just sufficient to produce superficial redness. Hyperemia of the affected area may be produced by the application of closed cups in which a vacuum is produced with a suitable pump.

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Query 5847.—"Insufficiency of Milk." C. E. B., Ohio, asks what to recommend where the mother is unable to supply nourishment for the child a few weeks after birth.

Before we can really make helpful suggestions, we must have a clearer idea of the conditions in this particular case. Is the woman healthy, are the mammary glands well developed, is she a primipara, or has she never been able to supply enough milk for her infants? Is the milk yield of normal quality? Many women, you know, have abundant milk, but the child starves upon it.

If the breasts are developed and the woman is not markedly anemic or tuberculous, keep her bowels open, give her plenty of good milk and malt extracts, together with small doses of pilocarpine. A good preparation of galega gives results in the majority of cases. Castor-oil inunctions have been strongly recommended.

We have found the measures already suggested efficacious in the majority of cases, but, as already pointed out, the underlying disorder must, in every case, be discovered and corrected. Small, undeveloped glands will not secrete a sufficient quantity of milk. A definite course of treatment designed to improve local conditions should be instituted in order to secure nourishment for possible subsequent children.

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Vide "Lancet," Feb. 20, 1904.

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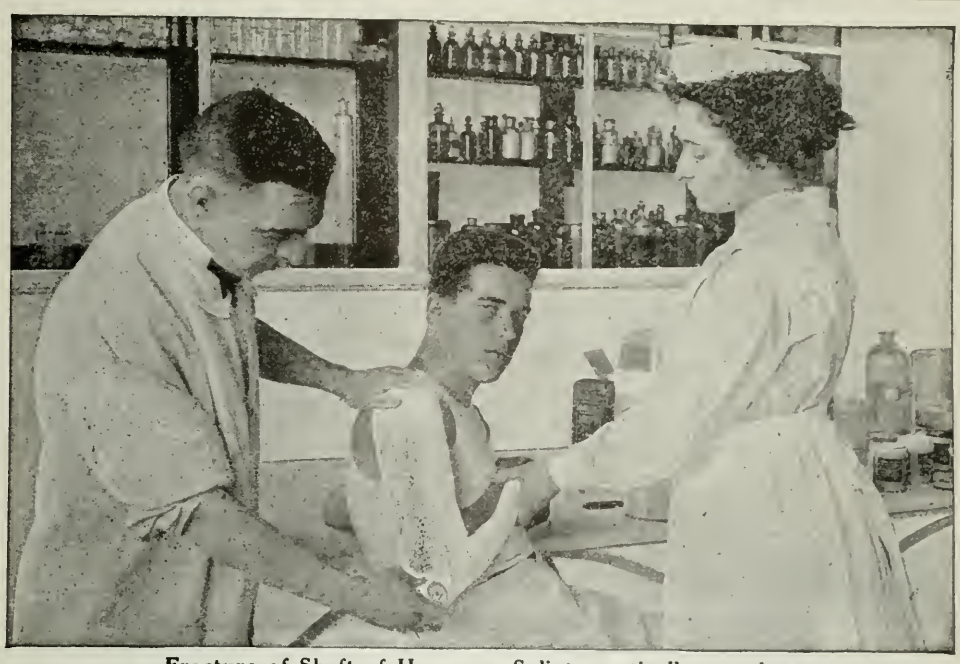

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Our supplies of Radium are obtained from Joachimstahl, the place of its original discovery, and its purity is guaranteed by the Austrian Government. Radium as prepared and used by us is employed and recommended by Von Noorden and Falta of Vienna, by His, Gudzent, Neusser and other eminent European authorities. Our preparations are already in use by prominent hospital and sanitarium physicians in this country, and are giving excellent results.

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What the law compels, the law should safeguard;

yet the dust from schoolroom floors has been declared by *The Lancet* to come second only to that collected from the floors of public houses, in the number and malignity of the disease germs it contains. Sweeping, admittedly, only increases the radius of the germs' activity. The only practical, effective defense against this constant menace to the health of whole communities lies in the routine employment of a germicide of recognized standard strength. This is provided in

PYXOL

which, by means of an ordinary fine rose watering-can, may be applied to the school-room floors in a few minutes.

"*To cleanse a school-room properly, it is necessary to destroy the germ-life, as well as to remove the visible dirt.*" (*Scotch Education Department Memorandum, November, 1907.*)

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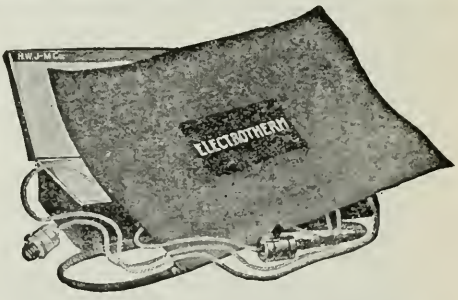

It consists of a thin, light and flexible sheet or pad containing wires insulated and protected with Asbestos. When attached to an ordinary incandescent lamp socket, it offers sufficient resistance to the current to produce a constant and uniform degree of heat. It is provided with a regulating switch by means of which any desired degree of heat can be obtained.

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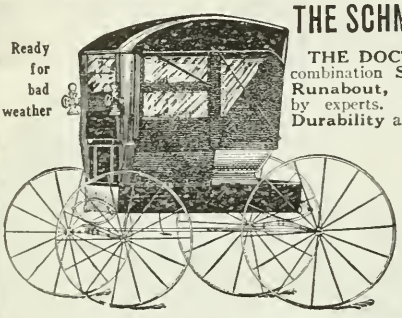

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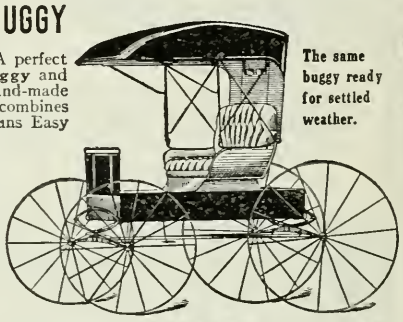

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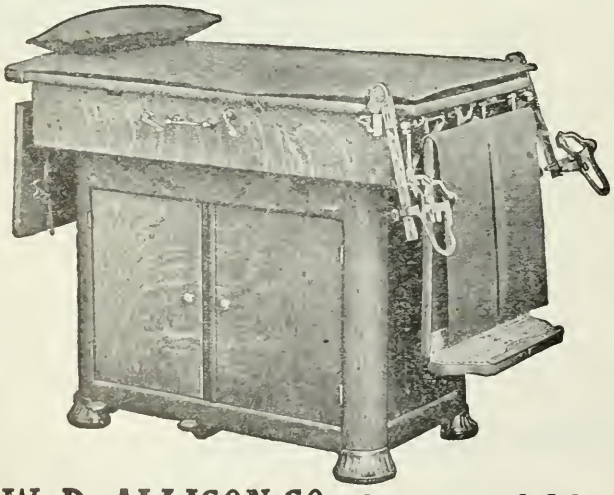

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You know how unsatisfactory most abdominal bandages are—hard to fit, hard to keep in place, often painful, always *expensive.* Then they make such a *bulk!* And women don't like that—especially *stout* women, who are too big already.

Your patients will be grateful to you for directing them to a corset that is ultra-stylish and comfortable—world-famed for durability (hence *economy*) —and in addition has a feature that reduces the figure symmetrically and is also a perfect abdominal support.

The LASTIKOPS BANDLET in this Corset gives better ABDOMINAL SUPPORT than the best separate abdominal bandage you can buy AT ANY PRICE

The Bandlet is made of our patented Lastikops Webbing—*semi-elastic.* It gives perfect support exactly in the *right spot.* It *can't* slip out of place. It is comfortable and effective no matter what position the wearer is in.

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A Big Improvement on the Old Fountain (Bag) Syringe

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The new device for douching now available is made of polished hard rubber and shaped somewhat like the gooseneck nasal douche, only that the neck is more extended. Its tubing connects directly with the faucet of the bath-tub. Less than a minute is required to connect it and to start the water supply going; this done, the user has at her command a steady flow of water—an unlimited amount for the most painstaking irrigation of the parts. The temperature of the water, and the pressure, can readily be regulated to suit.

Also—when necessary to use an antiseptic solution, as in leucorrhea, vaginitis, etc., the antiseptic materials may be placed in a chamber at one end of the douche (opened and closed by a screw cap), which the water takes up as it passes through.

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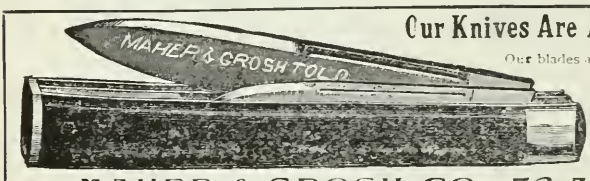

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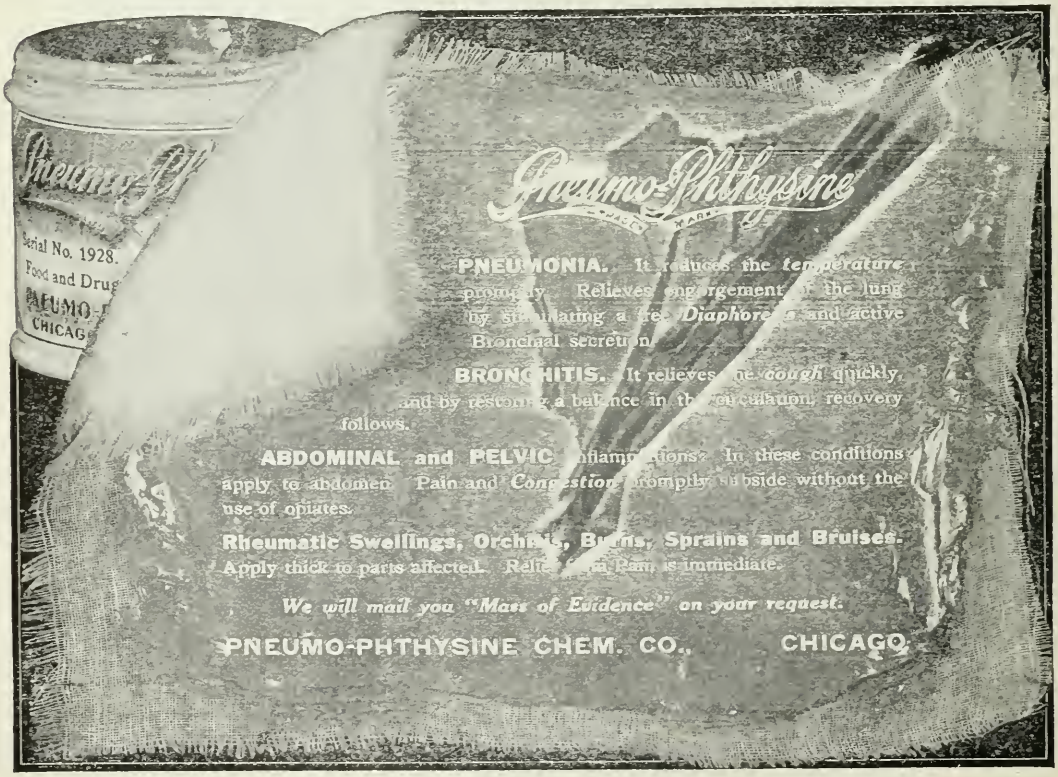
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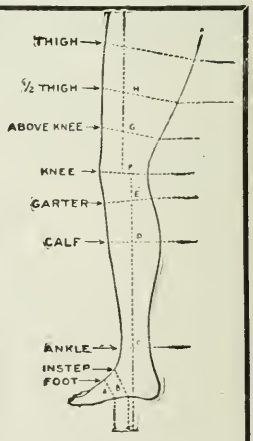

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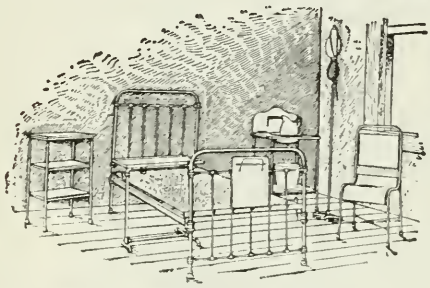

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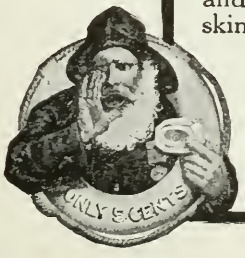

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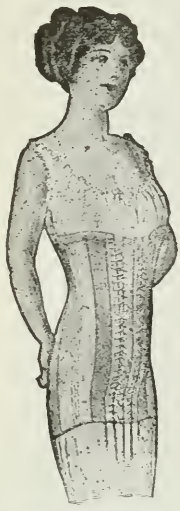

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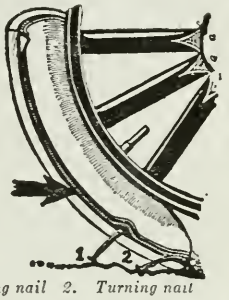

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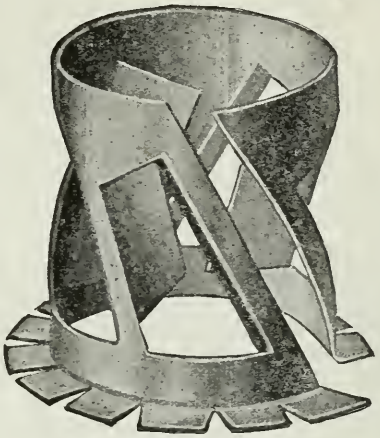

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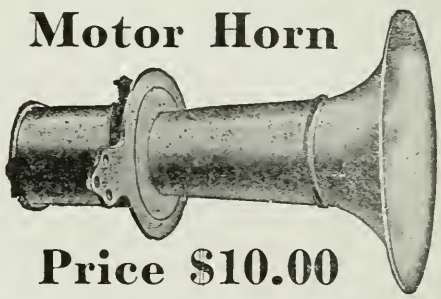

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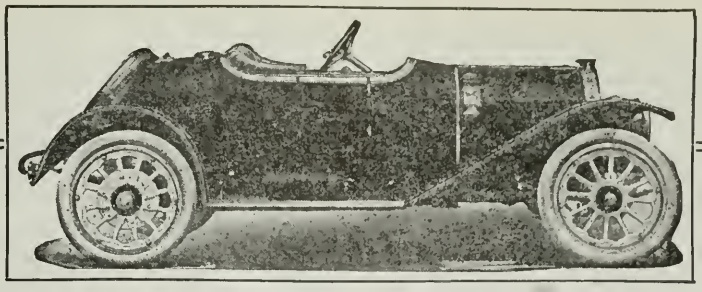

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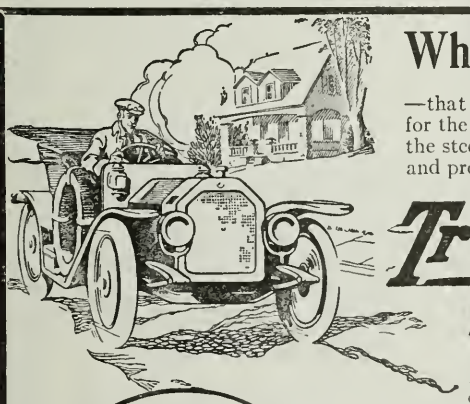

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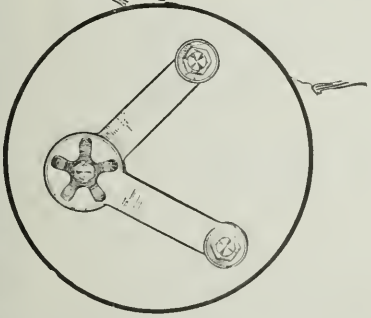

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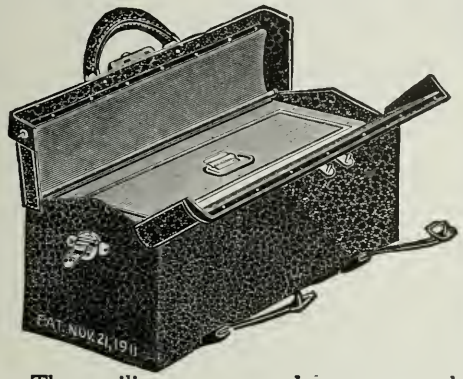

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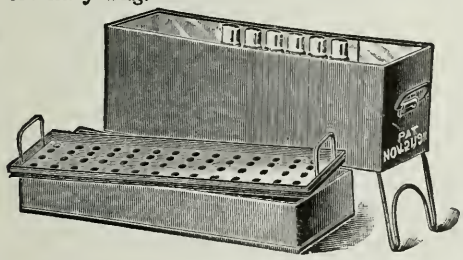

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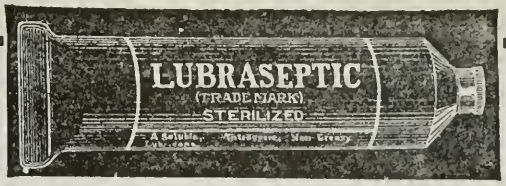

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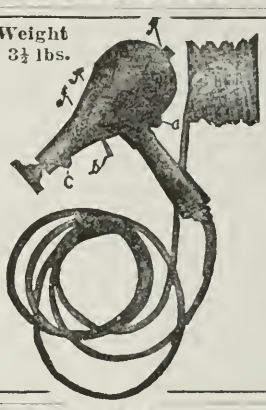

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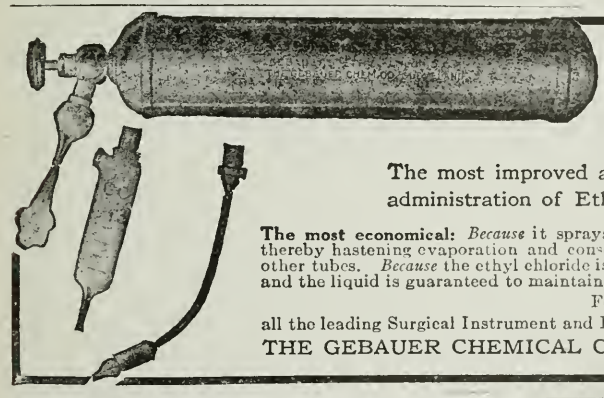

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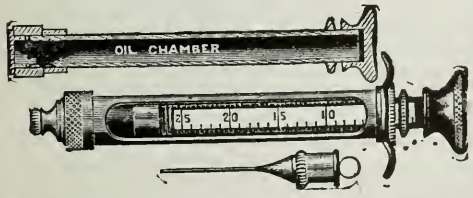

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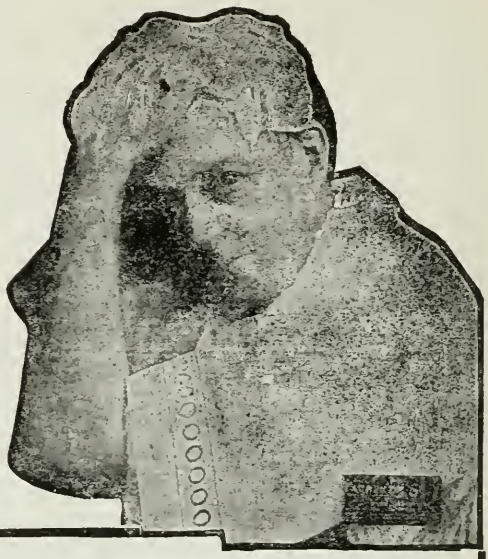

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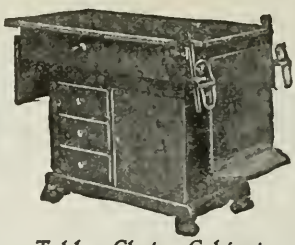

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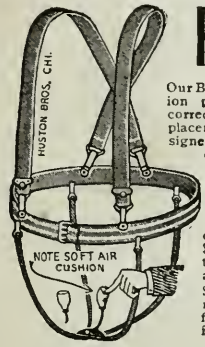

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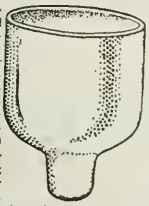

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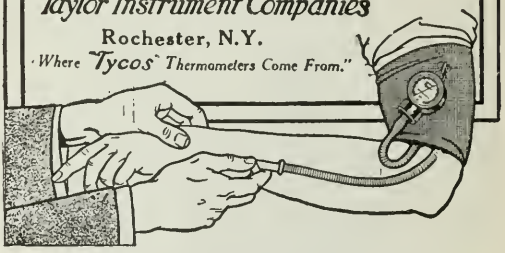

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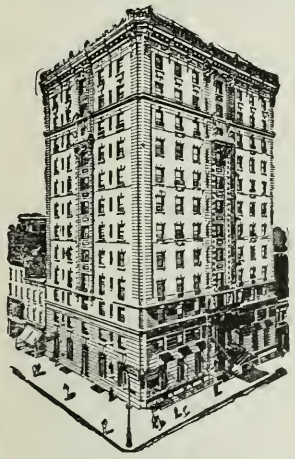

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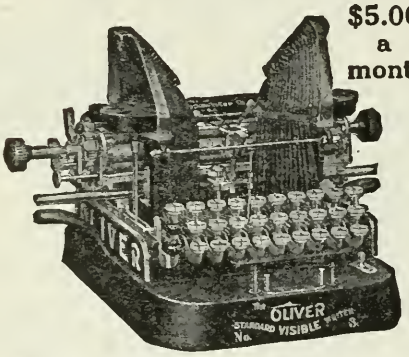

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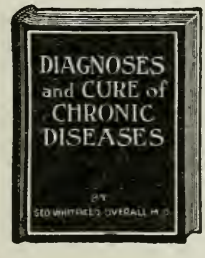

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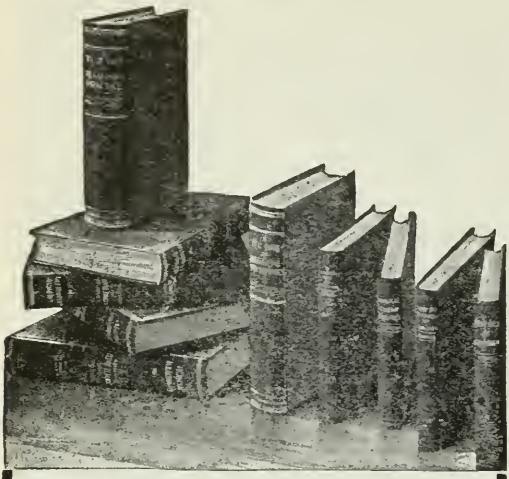

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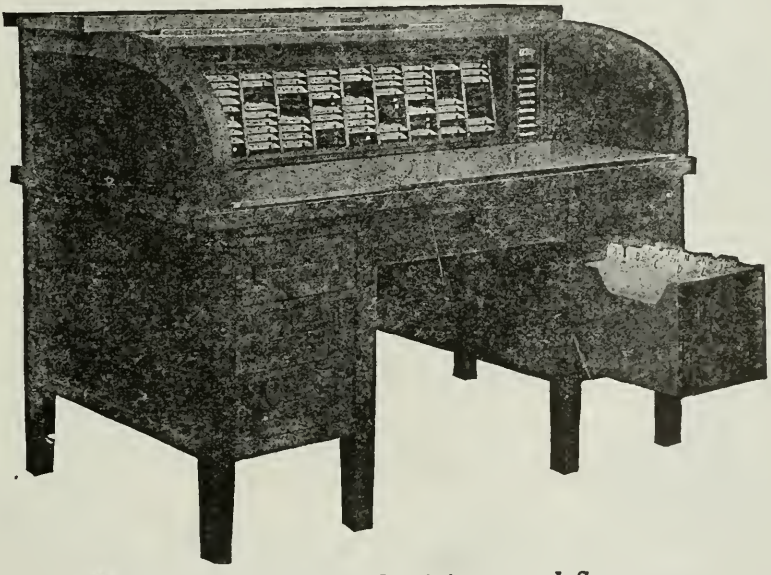

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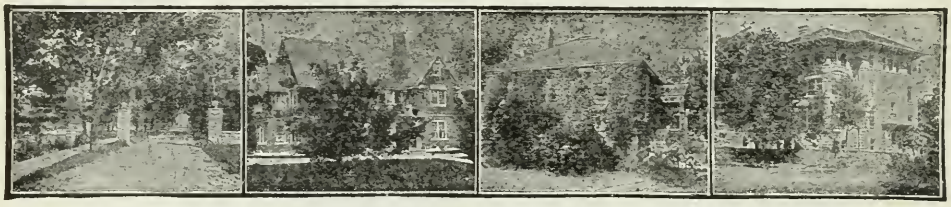

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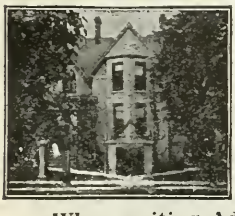

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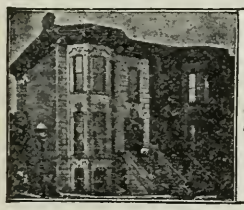

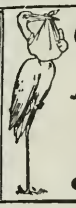

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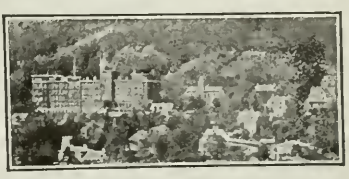

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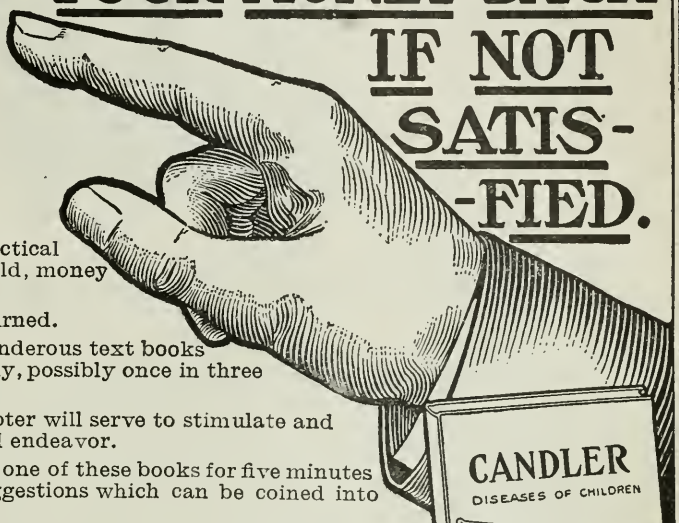

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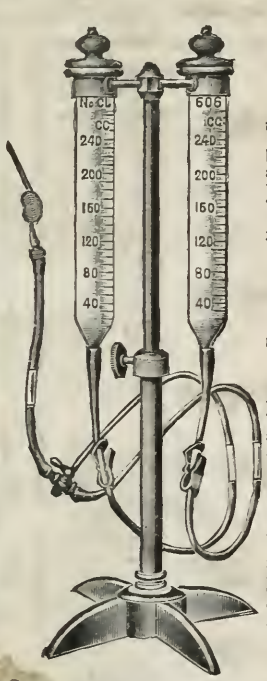

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